

## APPENDIX 1

A7RK

Site:	PCB INC
ID #:	MD63672350
Break:	11.6
Other:	8/3/2000 LV

### RESPONDENTS SIGNING ON BEHALF OF THEMSELVES

CONSOLIDATED EDISON COMPANY OF NEW YORK  
HIGH VOLTAGE MAINTENANCE CORPORATION  
JERSEY CENTRAL POWER & LIGHT COMPANY  
MIDAMERICAN ENERGY COMPANY  
SIERRA PACIFIC COMPANY  
UTILICORP  
WASTE MANAGEMENT, INC.

### RESPONDENTS REPRESENTED BY PCB TREATMENT, INC. STEERING COMMITTEE

GENERATOR NAME	OTHER NAME
903 NORTH MAIN STREET PROPERTY	
A & N ELECTRIC	
ABB AIR PREHEATER	(C-E Air Preheater)
ACME ELECTRIC COMPANY	
ADAMS COUNTY COOPERATIVE ELECTRIC COMPANY	(Adams County REC)
ADVANCE MILWAUKEE BRUSHES, INC.	(Advance Brushes, Inc.)
AFTON, CITY OF	
AG PROCESSING INCORPORATED	
AGRILINK FOODS	(Husman Snack Foods)
AGRIUM US	(Cominco American Inc.)
ALABAMA ELECTRIC COOPERATIVE	
ALAMEDA, CITY OF	(Bureau of Elect. Dept. of Utilities)
ALGOMA UTILITY COMMISSION	(Algoma Municipal Utilities)
ALLIEDSIGNAL, INC.	(Allied Corporation)
AM GENERAL	(Ren Acquisition)
AMCAST INDUSTRIAL CORPORATION	
AMERICAN ELECTRONIC	(Dura-Kool)
AMERICAN HOME PRODUCTS	(Shulton Inc.)
AMERICAN STANDARD, INC.	(American Standard Enamel and Iron Plant)
AMHERST MUNICIPAL UTILITIES	(Amherst, City of)
AMPACET CORPORATION	
ANCHOR HOCKING PLASTICS	(Plastics Inc.)
ANDERSON, CITY OF	(Anderson Municipal Light & Power)



AP AUTOMOTIVE SYSTEMS	(A.P. Parts Company)
APPERT FOODS	(Apperts Inc)
ARCO	
ARISTECH	(USS Chemicals Division US Steel)
ARIZONA ELECTRIC POWER COOP. INCORPORATED	
ARMCO INC.	(Cyclops Corporation)
ARROW FORKLIFT PARTS, INCORPORATED	
ASHLAND MUNICIPAL POWER PLANT	
ASHLAND PETROLEUM COMPANY	
ASSOCIATED MILK PRODUCERS	(AMPI)
ASSOCIATES FIRST CAPITAL CORP.	(Associates Bancorp, Inc./Associates Corp. of North America)
ATLANTIC MUNICIPAL UTILITIES	
ATLAS CRANKSHAFT	
AUSTIN UTILITIES	
AVESTA SHEFFIELD PLATE, INC.	(Ingersol Steel)
A.O. SMITH CORPORATION	(A.O. Smith Auto Products Co.)
BAGLEY PUBLIC UTILITIES	
BAILEY COUNTY ELECTRIC COOPERATIVE	
BAINBRIDGE, TOWN OF	(Bainbridge Municipal Elec. System)
BARC ELECTRIC COOPERATIVE	Barc
BASF CORPORATION	(BASF & Inmont Corporation)
BASIN ELECTRIC POWER COOPERATIVE	
BATAVIA, CITY OF	
BAYFIELD ELECTRIC	
BEATRICE BOARD OF PUBLIC WORKS	
BEAZER EAST, INC.	(Koppers Company)
BEDFORD RURAL ELECTRIC COOP	
BELOIT, CITY OF	(Beloit Municipal Power)
BEMIS COMPANY INC.	
BENTON COUNTY PUD DIST. NO. 1	
BENTON RURAL ELECTRIC ASSOCIATION	
BETHANY, CITY OF	
BETHLEHEM STEEL	(Drummond Dolomite Incorporated)
BF GOODRICH	
BICC CABLES CORPORATION	(Cablec Corporation)
BIG BEND ELECTRIC COOPERATIVE, INC.	
BLACK HILLS ELECTRIC COOPERATIVE	
BLISSFIELD MANUFACTURING COMPANY	(Berne Tube Products Co, Inc.)
BLUE HILL ELECTRIC DEPARTMENT	
BLUE HILL, CITY OF	(Blue Hill Light & Water Dept.)
BOC GROUP, THE	(Airco Carbon)
BOEING VERTOL	

BOHN ALUMINUM AND BRASS DIV PLT 9	
BON HOMME-YANKTON ELECTRIC ASSOCIATION	
BOONE RURAL ELECTRIC MEMBERSHIP CORPORATION	(Boon County REMC)
BOUNTIFUL CITY LIGHT & POWER	
BOUNTIFUL CITY POWER & ELECTRIC	
BOWLING GREEN, CITY OF	
BRADSHAW, VILLAGE OF	
BRECK SCHOOL ICE CENTER	
BREDA ELECTRIC SYSTEM	
BREESE, CITY OF	(City of Breese Light & Water)
BRIDGEPORT BRASS CORPORATION	
BRISTOL-MYERS SQUIBB COMPANY	(E.R. Squibb Corporation)
BROWN COUNTY REA	
BRYAN, CITY OF	(Bryan Municipal Power & Light)
BRYN MAWR HOSPITAL	
BUCHANAN COUNTY REC	
BUCKEYE STEEL CASTINGS	
BUFFALO GENERAL HOSPITAL	
BURT COUNTY PUBLIC POWER DISTRICT	
BUTLER COUNTY RPPD	
BUTLER TACONITE	
BUTTE ELECTRIC COOPERATIVE	
CABOT CORPORATION	
CAIRO LIGHT & WATER DEPARTMENT	
CAMBRIDGE PUBLIC UTILITIES	
CARRIER CORPORATION	(BDP Company)
CARROLL COUNTY REMC	
CEDARBURG LIGHT & WATER COMPANY	
CENTER MUNICIPAL ELECTRIC LIGHT	
CENTRAL ARIZONA IRRIGATION & DRAINAGE DISTRICT	(Electrical District #4)
CENTRAL ELECTRIC COOP	
CENTRAL INDIANA POWER	(Hancock County REMC)
CENTRAL SOYA CO INC	
CENTRALIA, CITY OF	(Centralia Power & Light Dept.)
CERTAINTED CORPORATION	
CHENEY PULP & PAPER COMPANY	
CHENEY, CITY OF	
CHEROKEE ELECTRIC COOPERATIVE	
CHIMNEY ROCK PUBLIC POWER DISTRICT	(Chimney Rock PPD)
CITIZENS GAS & COKE UTILITY	
CITIZENS UTILITIES	(Citizen Utility Water & Electric)

CITY ELECTRIC MOTOR COMPANY	
CLARKE ELECTRIC COOPERATIVE	
CLAVERACK RURAL ELECTRIC	
CLEVELAND TWIST DRILL	
CLEVELAND, CITY OF	
CLYDE IRON/UNITED DOMINION INDUSTRIES	(Clyde Company)
COCA-COLA BOTTLING MIDWEST	
CODINGTON-CLARK ELECTRIC COOPERATIVE	
COGGON MUNICIPAL LIGHT PLANT	
COLBY, CITY OF	(Colby Municipal Power & Light)
COLGATE PALMOLIVE	
COLLEGE OF ST. BENEDICT	
COLOR BOX	
COLORADO STATE UNIVERSITY	
COLUMBIA BASIN ELECTRIC COOPERATIVE INCORPORATED	
COMMUNITY HOSPITALS INDIANAPOLIS	(Community Hospital
COMSAT	(Communications Satellite Corporation)
CONSOLIDATED ELECTRIC COOPERATIVE, INC.	(Delaware Rural & Morrow Electric Coop)
CONTEL DATA CENTER	
CONTINENTAL DIVIDE ELECTRIC COOPERATIVE, INCORPORATED	
CONTINENTAL GRAIN COMPANY	
COOKEVILLE ELECTRIC DEPARTMENT	
COOPER INDUSTRIES, INC.	(Iowa Industries Inc.)
CORTLAND COUNTY INDUSTRIAL DEVELOPMENT AGENCY	
COTTAGE GROVE HIGH SCHOOL	
COVINGTON, CITY OF	
CRAIG-BOTETOURT	
CRISP COUNTY POWER COMMISSION	
CROUSE-HINDS COMPANY	
CROW WING COOP POWER & LIGHT COMPANY	
DAHLBERG LIGHT & POWER	
DAL-TILE INTERNATIONAL	(American Olean Tile Company)
DAVIDSON COLLEGE	
DAVISS-MARTIN COUNTY REMC	
DAWSON COUNTY PUBLIC POWER DISTRICT	
DAYTON HUDSON CORPORATION	
DEACONESS COMMUNITY FOUNDATION	(Deaconess Hospital)
DELTA FAUCET COMPANY	
DEMETER AGRO INCORPORATED	
DETROIT, CITY OF	
DEZURIK CORPORATION	
DIAMOND SHAMROCK CHEMICALS COMPANY	(Electro Analytical)
DICKENS ELECTRIC COOPERATIVE	

DORCHESTER, NEBRASKA ELECTRIC DEPARTMENT	(Dorchester, Village of)
DOTHAN ELECTRIC DEPARTMENT, CITY OF	
DOWAGIAC, CITY OF	(Dowagiac Dept. of Public Service)
DRAKE CENTER	(Drake Memorial Hospital)
DRAKE UNIVERSITY	
DUNCANNON, BOROUGH OF	(Duncannon Borough)
DURAMED PHARMACEUTICALS INC	
EAST END MUTUAL ELECTRIC COMPANY	
EAST GRAND FORKS WATER & LIGHT	
EAST POINT ELECTRIC	
EASTERN ILLINI ELECTRIC COOPERATIVE	(Illini Electric Cooperative)
EASTERN IOWA LIGHT & POWER	
EASTMAN MACHINE COMPANY	
EAU CLAIRE ELECTRIC COOPERATIVE	
EDISON SAULT ELECTRIC COMPANY	
EL DORADO SPRINGS BPU	
ELASTIC FABRICS OF AMERICA	
ELBERON DEVELOPMENT CORPORATION	
ELDON, CITY OF	(Eldon Municipal)
ELECTRIC MOTORS AND SPECIALTIES INCORPORATED	(Electric Motor Spec.)
ELECTRIC PLANT BOARD	(Franklin Electric Plant Board)
ELK RIVER MUNICIPAL UTILITIES	
ELKEM METALS COMPANY	
ELKHORN R.P.P.D.	
ELLENSBURG, CITY OF	
ELLIS, CITY OF	
ENGLEHARD CORPORATION	(Hardshaw Filtrol)
EPHRATA, BOROUGH OF	
ERMCO ELECTRICAL CONTRACTORS	
ESSROC CEMENT CORP.	(Rochester Portland Cement)
ESTES PARK, TOWN OF	(Estes Park Power & Light Co.)
EXXON BIO MEDICAL CORPORATION	
E.I. DUPONT DE NEMOURS	
FAIRFIELD MFG CO INC	
FANNIN COUNTY ELECTRIC COOPERATIVE	
FARMER JACK/A&P MARKETS	(Detroit Pure Milk Company)
FARMINGTON, CITY OF	(Farmington Electric Utility)
FEDERAL MOGUL	
FEDERAL MOGUL CORPORATION	
FEM ELECTRIC ASSOCIATION, INCORPORATED	
FERGUSON ELECTRIC SERVICE COMPANY	(Ferguson Electric Construction)
FITZPATRICK & WELLER	

FLOUR CITY BRUSH	
FONTANELLE, CITY OF	(Fontanelle Electric)
FORD METER BOX CO INC	
FORT JAMES CORPORATION	(James River Corporation)
FORT PIERCE UTILITIES AUTHORITY	
FOSTER WHEELER CORPORATION	(F.W. Environsponse Incorporated)
FRANK LUCCO COMPANY	
FRANKLIN ELECTRIC CO.	
FRANKLIN LIGHT AND POWER	(Franklin Light & Water)
FRANKLIN MINT	
FRANKLIN RURAL ELECTRIC COOPERATIVE	
FREEBORN-MOWER ELECTRIC COOPERATIVE	
FREEDOM FORGE CORPORATION	(American Welding & Manufacturing)
FRIDAY CANNING CORPORATION	
FRONTIER POWER COMPANY	
FROSTBURG STATE COLLEGE	
FT. MORGAN ELECTRIC DEPARTMENT	
F.M. BROWN'S SONS, INC.	
GAINESVILLE, CITY OF	(Gainesville Regional Utilities)
GATE CITY ELECTRIC COOPERATIVE, INCORPORATED	
GENERAL CRUSHED STONE	
GENERAL MOTORS CORPORATION	
GENERAL RAILWAY SIGNAL	
GENESIS WORLDWIDE INC.	(Monarch Machine Tool Company)
GEORGETOWN UNIVERSITY	
GLOBE VALVE	
GOTHENBURG, CITY OF	(Gothenburg Mun. Electric Systems)
GRAFTON MUNICIPAL UTILITY	
GRAND ISLAND, CITY OF	
GRAND VALLEY RURAL POWER LINES	(Grand Vally Rural Power Inc.)
GRAYSON-COLLIN ELECTRIC COOPERATIVE, INC.	
GREAT LAKES GAS TRANSMISSION	
GREDE FOUNDRIES	(Roberts Foundry)
GREEN MOUNTAIN POWER CORPORATION	
GREENDALE UTILITIES	(Town of Greendale Utility Dept.)
GREENE ELECTRIC DEPARTMENT, VILLAGE OF	
GREENFIELD MUNICIPAL UTILITIES	
GREENWOOD COMMISSION OF PUBLIC	
GRJ HOLDINGS, INCORPORATED	(Bell Cold Storage)
GROTON, CITY OF	(Groton Electric Light & Power)
GROUP HEALTH INCORPORATED	(Group Health Plan)
GTE SERVICE CORP. II	(General Telephone Company of Indiana))
GUERNSEY-MUSKINGUM ELECTRIC COOP.	

GUNNISON, CITY OF	
HALE PRODUCTS	(Hale Fire Pump Company)
HAMILTON, CITY OF	(Hamilton Public Electric)
HAMILTON, VILLAGE OF	
HAMMOND VALVE CORP.	
HAMPTON, VILLAGE OF	
HARLAN MUNICIPAL	
HARRIS TARKETT	
HARRIS THOMAS DROP FORGE CO.	
HARRISBURG, CITY OF	
HARRISON STEEL CASTINGS CO.	
HARSCO TRACK TECHNOLOGIES	(Fairmont Tamper/Fairmont Railway Motors)
HATFIELD, BOROUGH OF	(Hatfield Municipal Electric)
HEALTH EAST MIDWAY	(Midway Hospital)
HENRY FILTERS COMPANY	
HIBBING PUBLIC UTILITY	
HIGHLAND, CITY OF	(Highland Electric Department)
HILLSDALE BOARD OF PUBLIC UTILITIES	
HOBART BROTHERS COMPANY	
HOBART CORPORATION	
HOECHST CELANESE CORPORATION	
HOLDREGE, CITY OF	(Holdrege Municipal Power & Light)
HOLMES WAYNE ELECTRIC	
HOLY CROSS ELECTRIC ASSOCIATION	
HOWARD GREELEY RPPD	
HOWELL OREGON ELECTRIC COOPERATIVE	
HOWMET CORPORATION	(Howmet Turbine Components Corporation)
HUDSON FOODS	(Lea Foods)
HYSTER COMPANY	
IFF	(International Flavors & Fragrances)
ILLINOIS RURAL ELECTRIC COMPANY	
INDIANA MICHIGAN POWER COMPANY	(Indiana & Michigan Electric Co.)
INDIANAPOLIS ELECTRIC COMPANY	
INTERCOUNTY ELECTRIC ASSOCIATION, INC.	
INTERSTATE BRANDS CORPORATION	(ITT Continental Baking Company)
INTERSTATE TRANSFORMER COMPANY, INC.	
IOWA LAKES ELECTRIC COOP.	
JACKSON PURCHASE ELECTRIC COOPERATIVE	
JAMES RIVER LIMESTONE	
JEFFERSON SMURFIT CORPORATION	(Container Corp of America)
JERRY'S FOODS	
JEWELL-MITCHELL COOPERATIVE	(Jewell-Mitchell REA)
JIM BEAM BRANDS CO.	(National Distillers Products Company)

JOE WHEELER ELECTRIC MEMBERSHIP  
 JOHN MORRELL & COMPANY  
 JONES METAL PRODUCT COMPANY  
 JOSEPH E. SEAGRAM & SONS INCORPORATED  
 J.C. PENNEY COMPANY, INC.  
 KANKAKEE VALLEY REMC  
 KANSAS STATE UNIVERSITY  
 KARNES ELECTRIC COOPERATIVE  
 KAUKAUNA ELECTRIC & WATER  
 KBR RURAL PPD  
 KENDAL CROSSLANDS  
 KENNAMETAL, INCORPORATED  
 KEYNES BROS. INC.0  
 KIEL, CITY OF (Keil Utilities)  
 KIMBALL MUNICIPAL UTILITY  
 KINGSBURY ELECTRIC COOPERATIVE, INCORPORATED  
 KOOTENAI ELECTRIC COOPERATIVE, INCORPORATED  
 KRAVCO COMPANY (Krazco Company)  
 KUTZTOWN, BOROUGH OF  
 LAGRANGE COUNTY REMC  
 LAKE REGION ELECTRIC ASSOCIATION, (Lake Region Electric Cooperative)  
 INCORPORATED  
 LAKE WORTH, CITY OF  
 LAKEFIELD PUBLIC UTILITY  
 LAMB COUNTY ELECTRIC COOPERATIVE  
 LANGFORD ELECTRIC COMPANY  
 LATROBE STEEL COMPANY  
 LAUHOFF GRAIN COMPANY  
 LEAR CORPORATION (Lear siegler Inc)  
 LEHIGH PORTLAND CEMENT CO.  
 LEHIGHTON, BOROUGH OF  
 LIGHTHOUSE ELECTRIC COOPERATIVE, INCORPORATED  
 LINCOLN-UNION ELECTRIC COOPERATIVE  
 LINCOLN COUNTY POWER DISTRICT  
 LINCOLN ELECTRIC COOPERATIVE  
 LINK-BELT BEARING DIVISION (PTC Components)  
 LINTON MUNICIPAL LIGHT DEPARTMENT  
 LITTLE VALLEY, VILLAGE OF  
 LOCKHEED MARTIN CORPORATION (Martin Marietta/General Electric)  
 LOGAN COUNTY COOPERATIVE ASSOCIATION  
 LOGANSPOUT MUNICIPAL UTILITIES (Logansport Municipal Electric)  
 LONG ELECTRIC COMPANY  
 LONGVIEW PROPERTIES



LONGWOOD GARDENS	
LOOMIS ELECTRIC	
LOST RIVER ELECTRIC COOPERATIVE, INC.	
LOUIS PADNOS IRON AND METAL COMPANY	
LOVELAND, CITY OF	(Loveland Light & Power Dept.)
LUBRIZOL CO	
LYON-LINCOLN ELECTRIC COOPERATIVE, INC.	
M & M MARS	
MACK PRINTING GROUP	
MANITOWOC, CITY OF	(Manitowoc Public Utility)
MAPLEHURST FARMS LLC	(Maplehurst Dairy Inc)
MAQUOKETA VALLEY RURAL ELECTRIC COOPERATIVE	
MARATHON ASHLAND PETROLEUM LLC	(Marathon Oil Company)
MARIAH PACKING COMPANY	
MARION ELECTRIC COOP, INC.	
MARION GENERAL HOSPITAL	
MARRIOTT HOTEL	
MARSHALL, CITY OF	
MASONIC HOMES	
MCDONOUGH POWER COOPERATIVE	
MCPHERSON-BOARD OF PUBLIC, CITY OF	
MEADVILLE FORGING CO	
MECKLENBURG ELECTRIC COOP	
MECKLENBURG ELECTRIC COOPERATIVE	
MEDICAL COLLEGE OF PA	
MEDTRONIC, INCORPORATED	
MEEKER COOPERATIVE LIGHT & POWER ASSOCIATION	
MEPC O & I	(MEPC Gamble Tower/Minneapolis West)
MERCY HOSPITAL MEDICAL CENTER	
MERCY HOSPITAL NORTH	
MESA, CITY OF	(Mesa Utilities)
MET ELECTRICAL TESTING COMPANY, INC.	
METAL MASTERS FOOD SERVICE EQUIPMENT COMPANY, INC.	
MIDWEST STEEL	
MILLER EADS CO INC	
MINNESOTA VALLEY COOPERATIVE LIGHT & POWER	
MINNESOTA VALLEY ELECTRIC COOPERATIVE	
MIRRO OF MANITOWOC	(Mirro Corporation)
MISSOULA ELECTRIC COOP	
MOEN, INC.	(Stanadyne)
MOHAVE ELECTRIC COOPERATIVE	
MOHAWK MUNICIPAL COMMISSION	
MONARCH MACHINE TOOL COMPANY	(Monarch Sidney)

MONONA COUNTY REC	
MONROE WATER, LIGHT & GAS COMMISSION	
MONTEREY COAL COMPANY	
MONTPELIER, VILLAGE OF	
MORRISON KNUDSEN	
MORTON INTERNATIONAL, INC.	(Morton Salt Company)
MOTION CONTROL INDUSTRIES	
MOUNT DORA, CITY OF	
MT. CARMEL PUBLIC UTILITY COMPANY	
MULTI-TEST MAINTENANCE CORPORATION	
NABISCO HOLDINGS CORP.	(Nabisco Brands, Inc.)
NATIONAL STARCH AND CHEMICAL COMPANY	
NATURAL GAS PIPELINE	
NAVASOTA VALLEY ELECTRIC	(Limestone Co. Electric Coop)
NEW HOLSTEIN PUBLIC UTILITIES	
NEW KNOXVILLE, VILLAGE OF	
NEW LISBAN LIGHT & WATER	
NISHNABOTNA VALLEY RURAL ELECTRIC COOPERATIVE	
NODAK ELECTRIC COOPERATIVE	(Nodak Rural Electric Coop)
NORRIS ELECTRIC COOPERATIVE	
NORTH ALABAMA ELECTRIC COOPERATIVE	
NORTH CENTRAL ELECTRIC COOPERATIVE	
NORTH CENTRAL PPD	
NORTH STAR ELECTRIC COOPERATIVE	
NORTHEAST NEBRASKA RPPD	
NORTHERN LIGHT, INCORPORATED	
NORTHERN PLAINS ELECTRIC COOPERATIVE	(Tri-County Electric Cooperative-Carrington)
NORTHERN WASCO COUNTY PUD	(Northern Wasco County People's)
NORTHRUP KING COMPANY	
NORTHWEST RURAL ELECTRIC COOPERATIVE	(Sioux Electric Coop Assn)
NORTHWEST RURAL PUBLIC POWER DISTRICT	
NORTHWESTERN PUBLIC SERVICES COMPANY	
NORTHWESTERN REC ASSN. INC.	
NUTONE, INC.	
NVF COMPANY	
OGDEN MUNICIPAL LIGHT DEPARTMENT	
OILGEAR	(Oil Gear Company)
OKLAHOMA CITY UNIVERSITY	
OLIVER MERCER ELECTRIC COOPERATIVE, INCORPORATED	
OPELIKA LIGHT & POWER DEPARTMENT	
ORCAS POWER & LIGHT COMPANY	
ORD, CITY OF	(Ord Light & Water Dept.)
OTIS ELEVATOR COMPANY	

OTSEGO ELECTRIC COOPERATIVE, INC.	
OTTER TAIL POWER COMPANY	
OWENS-ILLINOIS, INC.	
OWENS CORNING FIBERGLASS CORPORATION	
OXFORD MUNICIPAL LIGHT & WATER	
OXYCHEM	(Occidental Chemical Corporation)
PAULDING PUTNAN ELECTRIC	
PELLA, CITY OF	
PEMBERVILLE, VILLAGE OF	
PEND ORCILLE COUNTY PUBLIC UTILITY DISTRICT	(PUD #1 of Pend Orcille Co.)
PENN YAN MUNICIPAL UTILITIES	
PENTON PRESS	(Penton IPC)
PEPSI-COLA BOTTLING CO. OF WILMINGTON	
PIERRE, CITY OF	(Pierre Municipal Power & Light)
PIQUA, CITY OF	(Piqua Municipal Power Systems)
PLAINS ELECTRIC COMPANY	
POINTE COUPEE ELECTRIC MEMBERSHIP CORPORATION	
POLK COUNTY RPPD	
POLY INSTITUTE OF NEW YORK	
PPG INDUSTRIES INC	
PREMIX, INC.	
PRICE ELECTRIC	
PRINCE GEORGE ELECTRIC COOPERATIVE	
PT COMPONENTS INC.	
PUBLIC UTILITY DISTRICT NO. 1 OF MASON COUNTY	(Mason PUD #1)
PUBLIC UTILITY DISTRICT OF GRANT COUNTY	
PUD #2 OF PACIFIC COUNTY	
QUAKER OATS COMPANY	
RANTOUL, CITY OF	(Rantoul Light & Power)
RAYMOND CORPORATION	
READLYN, CITY OF	
RELTEC-POWERS	(Lorain Products)
RENVILLE SIBLEY COOPERATIVE POWER ASSOCIATION	(Rendvile Celby Coop Power)
RESINOID ENGINEERING CORPORATION	
RICH PRODUCTS CORPORATION	
RICHMOND POWER & LIGHT	David Osburn
RICK ELECTRIC	
RIDGE TOOL COMPANY	
RISING SUN UTILITIES	
RIVERSIDE ELECTRIC	
ROBBINS & MEYERS INC.	

ROCK-TENN COMPANY	
ROCK COUNTY ELECTRIC COOP	
ROCK RIVER WATER RECLAMATION DISTRICT	(Sanitary District of Rockford)
ROCKWELL INTERNATIONAL	
ROLLWAY BEARING DIVISION	
ROOSEVELT POWER DISTRICT	(Roosevelt PD)
ROWE MANUFACTURING	(Salem Frame Company)
RUNESTONE ELECTRIC ASSOCIATION	
RUSSELL, CITY OF	(Russell Municipal Power & Light)
RW SIDLEY, INC.	
S & W WASTE, INC.	
SABROSKE ELECTRIC, INC.	
SACRAMENTO MUNICIPAL UTILITY DISTRICT	
SANDUSKY PLASTICS, INC.	
SANTEE COOPER	
SANYO CORPORATION	
SCHMIDT BAKING COMPANY	
SCM GLIDDEN METALS COMPANY	
SCM METAL PRODUCTS	
SCOTT BRASS, INCORPORATED	
SCOTT PAPER COMPANY	
SENECA FOODS CORPORATION	(Kennett Canning Company)
SENECA FOUNDRY INCORPORATED	
SEPTA	
SEVIER COUNTY ELECTRIC SYSTEM	
SEWARD COUNTY RPPD	
SHENANDOAH VALLEY ELECTRIC COOPERATIVE	
SHENANGO, INC.	
SHERIDAN ELECTRIC COOPERATIVE	
SHERILL, CITY OF	(Sherrill Power & Light)
SHINER, CITY OF	
SIEMENS POWER TRANSMISSION	(Landis & Gear)
SILAS BOLEF COMPANY	
SOLVAY, VILLAGE OF	
SOUTH CENTRAL ELECTRIC ASSOCIATION	
SOUTH ST. PAUL PUBLIC SCHOOLS	
SOUTHDOWN, INC.	(Kosmos & Portland Cement)
SOUTHEASTERN ILLINOIS ELECTRIC COOPERATIVE INCORPORATED	
SOUTHERN DUCTILE CASTING CORPORATION	
SOUTHERN ILLINOIS POWER COOPERATIVE	
SOUTHSIDE ELECTRIC COOPERATIVE	
SOUTHWEST CENTRAL RURAL ELECTRIC COOPERATIVE, CORPORATION	
SOUTHWEST PUBLIC POWER DISTRICT	

SPARTA MANUFACTURING	
SPOON RIVER ELECTRIC COOPERATIVE	
SPRINGVILLE CITY POWER & LIGHT	(Springville Municipal Power)
STANBERRY, CITY OF	
STANTON COUNTY PUBLIC POWER DISTRICT	
STAUFFER MANAGEMENT COMPANY	(Stauffer Chemical Company)
STEEL WAREHOUSE COMPANY, INC.	
STOUGHTON, CITY OF	
ST. CLOUD HOSPITAL	
ST. CROIX ELECTRIC COOPERATIVE	
ST. LOUIS MUNICIPAL ELECTRIC	
ST. LUKES HOSPITAL	
ST. PAUL COMPANY	
SUFFOLK COUNTY WATER AUTHORITY	
SULLIVAN COUNTY RURAL ELECTRIC	
SULLIVAN ELECTRIC	
SULLIVAN, CITY OF	
SWEETWATER ELECTRIC SYSTEM	
SWISHER ELECTRIC COOPERATIVE, INCORPORATED	
S.E. IOWA COOPERATIVE ELECTRIC	
TARKETT	(Tarkett, Inc.)
TEXAS INSTRUMENTS INC.	
THIEF RIVER FALLS WATER & LIGHT	
THOMASVILLE, CITY OF	
TIMKEN COMPANY	
TOMS FOODS	
TORO COMPANY	
TOSOH SMD, INC.	(Varian Specialty Metals)
TREDYFFRIN EASTTOWN SCHOOL DISTRICT	
TRENTON MUNICIPAL UTILITIES	
TRI-COUNTY ELECTRIC COOPERATIVE-HOOKER	
TRI-STATE GENERATION & TRANSMISSION ASSOCIATION, INC.	
TRICO ELECTRIC COOPERATIVE, INCORPORATED	(Tri-County Elec.-Tucson)
TURNER HUTCHINSON ELECTRIC	
TWIN COUNTY ELECTRIC POWER	
TWIN VALLEYS PUBLIC POWER DISTRICT	
TWO RIVERS WATER & LIGHT	
UNION CITY MOLD	
UNION PACIFIC	
UNION PACIFIC RESOURCES GROUP	(Champlin Petroleum Company)
UNION RURAL ELECTRIC COOPERATIVE, INCORPORATED	
UNISYS CORPORATION	(Sperry Corporation)
UNITED FOODS, INC.	

UNITED PROPERTIES	
UNITED RURAL ELECTRIC, INC.	
UNITED TECHNOLOGIES CORPORATION	(Hamilton Standard Control)
UNIVERSITY OF TOLEDO	
UNOCAL	(Union Oil of California)
URSCHAL LABORATORIES, INC.	
UTILITIES DISTRICT OF WESTERN INDIANA REMC	
VALLEY ELECTRIC ASSOCIATION	(Valley Co. Electric Coop)
VIBRATECH	(Hydraulics Houdaille Inc.)
VILLISCA MUNICIPAL POWER PLANT	
VINELAND, CITY OF	
W & M MANUFACTURING	
WADSWORTH ELECTRIC UTILITY	
WAHOO UTILITIES	
WARNER LAMBERT	
WARREN COUNTY REMC	
WASHINGTON ELECTRIC COOPERATIVE, INCORPORATED	
WATER WORKS & LIGHTING COMMISSION	(Wisconsin Rapids Municipal)
WATERLOO LIGHT & POWER	
WAUNAKEE UTILITIES	(Waunakee Municipal)
WAYNE FARMS DIVISION OF CONTINENTAL GRAIN	(Wayne Poultry Division of Continental Grain)
WCIA TV	
WEBSTER, CITY OF	
WESTERN FARMERS ELECTRIC COOPERATION	
WESTERVILLE, CITY OF	
WHEATLAND, TOWN OF	
WHETSTONE VALLEY ELECTRIC COOPERATIVE	
WHIRLPOOL CORPORATION	
WILKES-BARRE HOUSING AUTHORITY	
WILLIAM B. WOOD/CITY OF NORFOLK	
WINNEBAGO RURAL ELECTRIC COOP.	
WINONA STATE UNIVERSITY	
WITCO CHEMICAL CORPORATION	
WITHLACOOCHIE RIVER ELECTRIC	
WOODVILLE, VILLAGE OF	
WRAY, CITY OF	(Wray Municipal)
YELLOW SPRINGS, VILLAGE OF	
ZIEGLER COAL COMPANY	

**APPENDIX 2**  
**FEDERAL RESPONDENTS**

BLUE PLAINS WASTE WATER TREATMENT  
BOLLING AFB  
BUREAU OF RECLAMATIONS  
COLUMBIA, DISTRICT OF  
DEFENSE LOGISTICS AGENCY  
DEPARTMENT OF VETERANS AFFAIR  
DOVER AFB  
FEDERAL AVIATION ADMINISTRATION  
GSA  
JOB CORPS U. S. DEPARTMENT OF LABOR  
LINCROFT ENTERPRISES  
MCCLELLAN AFB  
NATIONAL INSTITUTE OF HEALTH  
NORFOLK, CITY OF  
PRINCETON UNIVERSITY  
SAN CARLOS IRRIGATION PROJECT  
ST. PAUL POST OFFICE  
US COAST GUARD  
US POST OFFICE  
US DEPARTMENT OF INTERIOR  
USDOE / WESTERN AREA POWER  
USDOE / FERMILAB  
USDOE / STRATEGIC PETROLEUM RESERVE  
USDOE / SOUTHWESTERN POWER

### **APPENDIX 3**

Action Memorandum - 2100 Wyandotte Street, Kansas City, Missouri

Action Memorandum - 45 Ewing Street, Kansas City, Kansas





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII  
901 NORTH 5TH STREET  
KANSAS CITY, KANSAS 66101

**ENFORCEMENT ACTION MEMORANDUM**

SUBJECT: Request for a Removal Action at PCB Treatment, Inc., Site  
45 Ewing Street, Kansas City, Wyandotte County, Kansas

FROM: Pauletta R. France-Isetts, RPM *Pauletta R. France-Isetts*  
Missouri/Kansas Remedial Branch

THRU: Steve Kovac, Chief *Steve Kovac*  
Missouri/Kansas Remedial Branch

TO: Michael J. Sanderson, Director  
Superfund Division

Site ID#: RJ

CERCLIS ID: KSD980963565

**I. PURPOSE**

The purpose of this Enforcement Action Memorandum is to request and document approval for a non-time-critical removal action at part of the PCB Treatment, Inc., site located at 45 Ewing Street, Kansas City, Wyandotte County, Kansas. Potentially responsible parties (PRPs) may perform this removal action. Therefore, no funding for an Environmental Protection Agency (EPA) implementation of this removal action is requested at this time. In the event that PRPs do not perform this removal action pursuant to an Administrative Order on Consent, EPA Region VII plans to issue a Unilateral Administrative Order to compel the PRPs to implement the removal action. No nationally significant issues exist at this site.

**II. SITE CONDITIONS AND BACKGROUND**

**A. Site Description**

A Removal Site Evaluation (RSE) study was conducted in accordance with the terms of an Administrative Order on Consent between a group of former PCB Treatment, Inc., (PCB, Inc.) customers and the EPA. The RSE included sample collection and analysis for areas in and around the structure located at 45 Ewing Street. Samples of the following media were collected and analyzed during the RSE: soils (surface and subsurface), groundwater, concrete dust, air, concrete cores, wipe, and sludge.

Analytical data for the samples collected indicated polychlorinated biphenyl (PCB) contamination at concentrations which represent a threat to human health and the environment. Action levels established after evaluation of risks to human health and the environment were exceeded in both interior and exterior samples. Interior samples indicated that both the walls and the floors are contaminated with PCBs. Soil samples, collected exterior to the structure, indicated PCB concentrations greater than the action levels. Groundwater contamination was detected, but at levels below the action level.

The portion of the site addressed by this Action Memorandum consists of a five-story building with a full basement and surrounding soils, see Figure 1. It is located at 45 Ewing Street, Kansas City, Kansas, see Figure 2. The building is a column and flat slab framing system structure with exterior masonry infilled walls and shares a common wall with a two-story building to the southeast. This property is bordered by buildings on the southeast and northwest, Ewing Street on the west and rail lines on the east. Historical uses of the property were generally for storage and light industry. Information from the 1990 U.S. Census indicates a population of about 3,022 within a one-mile radius of the site. The 1990 Census indicates that the population residing in the vicinity of the site are of Caucasian, African-American, and Hispanic origins.

There are two schools and day care centers, one hospital, one park, five food manufacturing facilities, and one wastewater treatment plant within a one-mile radius of the site. Thirty-two restaurants and bars are also present within this area.

This part of the site is located on a developed piece of property. The tract of land is flat-lying and underlain by alluvial deposits associated with the Kansas River. The Ewing Street property is located in the West Bottoms, an area that is being actively re-developed. Land use of the surrounding area is currently medium to heavy industrial.

Releases of materials contaminated with PCBs occurred during operations at the site. These releases were likely the result of spilled, splashed, leaked, or poured PCB-contaminated oil which came to be located in and on the floor, walls, and soils surrounding the building. Information gathered during the RSE indicates that all floors are contaminated with PCBs above health-based levels.

PCB, Inc., was authorized by the EPA pursuant to the Toxic Substances Control Act (TSCA) to treat and dispose materials containing PCBs. Historically, PCBs were commonly used as coolants and lubricants in transformers, capacitors, and other electrical equipment. The manufacture of PCBs stopped in the United States in 1977 due to evidence that they accumulate in the environment and cause harmful effects.

PCB, Inc., began operations at 45 Ewing Street in Kansas City, Kansas, during September 1984. Operations at the facility included: de-chlorination of PCB-contaminated oils and temporary storage of PCB items. The EPA granted PCB, Inc., a permit authorizing an alternate method of de-chlorinating oils contaminated with PCBs. During September 1984, PCB, Inc., requested that the permit be transferred to its wholly owned subsidiary, Environmental Resource Management, Inc., (ERMI) which would operate at 45 Ewing Street, Kansas City, Kansas. This request was approved. PCB, Inc., operated at both the 2100 Wyandotte and 45 Ewing Street locations through 1986. During this time period, PCB, Inc., operated under other names which included: PCB, Inc., of Missouri; PCB, Inc., of Kansas; Environmental Resource Management, Inc.; PCB, Inc.; and Envirocare (which acted as a marketing arm for the company).

Customers of PCB, Inc., included the federal government, rural electric cooperatives, utility companies, cities, states, and large and small businesses. During its period of operation, approximately 1,500 parties shipped materials contaminated with PCBs to the site, including transformers and capacitors. These items contained PCB concentrations ranging from about 50 parts per million (ppm) to nearly 100 percent PCBs. The total gross weight of materials sent to the site for treatment and disposal was in excess of 25 million pounds.

PCB, Inc., operated on all floors of the structure located at 45 Ewing Street. Shipments of PCB items from the 2100 Wyandotte Street facility were received on the first floor. Oil dechlorination was conducted on the first floor. The remaining floors were used for PCB item storage.

Annual TSCA inspections were made at the facility. Significant violations were observed during the 1985 TSCA inspection; a Notice of Violation was issued to PCB, Inc. PCB, Inc., was assessed a fine and required to "clean" close the facility when it ceased business operations. Inspections were much more frequent after 1985. Near the end of operations, inspections were occurring on a weekly basis. PCB, Inc., requested that its permits be renewed at the end of the three-year period. The EPA refused to renew the permits and PCB, Inc., ceased processing capacitors during late 1986 and ceased de-chlorinating oil during early 1987.

This site is not on nor has it been proposed for inclusion on the National Priorities List of sites.

#### B. Other Actions to Date

PCB Treatment, Inc., was inspected several times by EPA during its period of operation. These inspections identified permit violations and releases of PCB-contaminated oil.

The owners took various steps to attempt site clean up after PCB Treatment, Inc., ceased operations. These clean-up attempts were made between 1987 and 1991.

Site investigations, as a part of the EPA TSCA efforts, were initiated during 1989 and continued until 1992. The purpose of these investigations was to follow the progress of and evaluate the success of the various clean-up technologies. Analytical data generated as a result of EPA's investigations indicated that the clean-up technologies used were not effective in removing PCB contamination and may have resulted in PCBs migrating into the concrete matrix.

A group of former customers prepared an Engineering Evaluation/Cost Analysis (EE/CA) study for the site. This document was submitted to EPA, pursuant to an Administrative Order on Consent, during June 2000. Response technologies to address the PCB-contamination at the site were discussed and evaluated.

The EPA prepared an Executive Summary during June 2000 based on the information contained in the RSE and EE/CA. The Executive Summary identified the preferred removal action to include demolition of the structure and excavation of the PCB-contaminated soils. The materials generated by these activities are to be disposed at landfills licensed and authorized to accept the materials or sent to an off-site incinerator if the PCB concentrations require destruction. Previous clean-up attempts at the site, using washing, solvent rinsing, shot-blasting, scouring, etc., have not been successful and may have exacerbated the problems. Therefore, EPA has determined that the most effective way to remove the contamination and the resultant threat is to demolish the building and excavate the contaminated soils.

#### C. State and Local Authority Roles

The Kansas Department of Health and Environment (KDHE) has been an active participant during the site evaluation process. KDHE staff have been kept informed of all site-related activities. The Unified Government of Kansas City, Kansas, and Wyandotte County, Kansas, has been informed of site activities.

### **III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT**

PCBs do not burn easily and are, therefore, good insulating material. They were used as coolants and lubricants in transformers, capacitors, and other electrical equipment. The manufacture of PCBs stopped in the United States in 1977 because of evidence that they build up in the environment and cause harmful effects to human health. PCBs have been designated hazardous substances pursuant to Section 310(b)(2)(A) of the Federal Water Pollution Control Act, 33 U.S.C. §1321(b)(2)(A), and have been listed as toxic pollutants pursuant to Section 307(a) of the Federal Water Pollution Control Act, 33 U.S.C. §1317(a). Products containing PCBs include: capacitors, transformers, regulators, old fluorescent lighting fixtures, electrical appliances containing PCB capacitors, old microscope oil, and hydraulic fluids.

People exposed to PCBs in the air for a long time have experienced irritation of the nose and lungs, and skin irritations, such as acne and rashes. PCBs have been found to cause cancer of the liver in rats. The U.S. Department of Health and Human Services, Public Health Service,

Agency for Toxic Substances and Disease Registry (ATSDR) has determined that PCBs may reasonably be anticipated to be carcinogens. The EPA has determined that PCBs are a possible human carcinogen.

As part of the RSE, a table was developed which identified the PCB concentrations which correlate with an unacceptable risk to human health. The table below presents the PCB clean-up levels that are risk based and specific to this site. These clean-up levels are based on a residential/commercial use of the site (based on projected land-use in the area).

Sample Type	Clean Up Level	Source
Wipe (surface concentration)	1 microgram per hundred square centimeters (ug/100 cm <sup>2</sup> )	Minimum Detection Limit (MDL)
Air (air concentrations)	0.5 ug/cubic meter (m <sup>3</sup> )	MDL
Bulk Concrete (concentrations within concrete)	1 milligram/kilogram (mg/kg) or ppm	Toxic Substance Control Act 40 CFR Part 761.125
Segregation and disposal Value for Bulk Concrete (top one inch)	50 mg/kg	Toxic Substance Control Act 40 CFR Part 761.125
Soil (top 10 inches)	1 mg/kg or ppm	Toxic Substance Control Act 40 CFR Part 761.125 (c)(4)(v)
Soil (depths greater than 10 inches)	10 mg/kg or ppm	Toxic Substance Control Act 40 CFR Part 761.125(c)(4)(v)

The Site Characterization Report was completed during August 1999. This report concluded that all floors of the former PCB, Inc., facility located at 45 Ewing Street are contaminated with PCBs at concentrations above health-based levels. The contamination extends to stairwells, basement, and exterior areas, including soils. PCB concentrations in the building of up to 1,790 ppm have been detected at the site. PCB concentrations of 1,450 ppm have been detected in the soils. Health-based concentrations were exceeded on portions of all floors, with the first floor being the most heavily contaminated. PCBs were detected in groundwater at concentrations below the health-based action level. The action level for PCBs in soils (the point at which EPA requires a response action to protect human health and the environment) at the site is one ppm. A response action is clearly necessary to provide protection of human health and the environment.

#### IV. STATUTORY AND REGULATORY AUTHORITIES

Section 104 of the Comprehensive Environmental Response, Liability and Compensation Act, as amended, (CERCLA) and the regulations promulgated thereunder in the National Contingency Plan (NCP), 40 C.F.R. §300.415(b) provide that EPA may conduct a removal action when it determines that a release or threat of release of hazardous substances poses a substantial threat to human health or the environment. Under Section 106 of CERCLA, EPA can order a PRP to perform a removal action when EPA determines that there may be an imminent and substantial endangerment to public health, welfare, or the environment from the release of hazardous substances at a site. PCBs are hazardous substances as defined by CERCLA § 101(14).

The NCP at §300.415(b)(2) contains eight criteria or factors to be assessed when considering the need for a removal action. Several of these criteria apply to this removal action and are as follows.

##### A. Specific Criteria Applicable to this Removal Action

1. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants, or contaminants

Humans could be exposed to the PCBs in the soil at this site. Such exposures would include occupational exposures to the populations working at or visiting the site (such as individuals making deliveries or pickups to the facilities at the site or maintenance personnel). In addition, persons, including children from the nearest residential developments, could trespass on the site during days or hours when the facilities are not in operation and be exposed to contaminants in the surface soil.

A principal means of exposure would be from the incidental ingestion of contaminated soil. The highest PCB concentration detected in the soils was 1,450 ppm. However, some exposures might also occur from dermal contact with the contaminated soil, from the inhalation of wind-blown contamination dust, and from the ingestion or dermal contact with contaminated surface water runoff.

Another principal means of exposure would be from dermal contact with contaminated building surfaces. The highest PCB concentration detected in the building was 1,790 ppm. However, some exposures might also occur from inhalation of contaminated dust within the building.

2. High levels of hazardous substances, pollutants, or contaminants in soils largely at or near the surface that may migrate

Soil which is to be addressed by this removal action contains concentrations of PCBs up to 500 ppm, which is well above concentrations that EPA finds acceptable in its TSCA Spill Policy, even for sites in industrial/nonresidential settings (25 ppm).

3. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released

The Ewing Street facility is located in the Kansas River flood plain. Flooding and the rapid flow of water across a site can either pick up and deposit contaminated soil or can deposit sediment on top of the site. Fortunately, no flood-related migration of PCB contamination has been detected. However, future high-water events might act differently and carry contaminated soil onto adjacent properties.

4. The availability of other appropriate federal or state response mechanisms to respond to the release

Neither EPA nor KDHE have identified authorities other than the EPA Superfund removal program which could be used in an efficient manner to address the PCB contamination.

#### **B. Endangerment Determination**

In summary, as indicated in the discussion of several of the above criteria, the actual or threatened releases of hazardous substances from the Ewing Street facility, including but not limited to PCBs, if not addressed by the implementation of the response action selected in this Action Memorandum, present an imminent and substantial endangerment to public health, welfare, or the environment.

### **V. PROPOSED ACTIONS AND ESTIMATED COSTS**

#### **A. Proposed Actions**

The EE/CA for the site was approved by EPA during June 2000. This document evaluated different means of addressing the PCB contamination found at the site. (A copy of the EE/CA can be found in the Administrative Record for the site at the Kansas City, Kansas, Main Public Library, 625 Minnesota Avenue, Kansas City, Kansas.)

Two categories of action, no-action and solvent washing, were determined to be ineffective to reduce contamination concentrations to values which would be protective of human health or the environment. Actual use of these technologies at other sites with PCB contamination has not been effective.

Controlled demolition of the building and excavation of the contaminated soils have been selected as the preferred response. PCB-contaminated debris and/or soils are to be disposed in a licensed landfill. It is estimated that 13,500 tons of building debris will be generated. Demolition of the building is to be performed from the roof down. The building will be dismantled in a "surgical" manner to better control fugitive dust emissions. Concrete debris from the building will be segregated, based on contamination concentrations, and shipped to an appropriate licensed landfill for disposal. Some portions of the building may require off-site incineration as a result of the PCB concentrations within the concrete. PCB contamination of the soils surrounding the building is not thought to be more than 12 inches in depth. Approximately 650 tons of soil are estimated to be contaminated at concentrations above the action level at the site. Soils will be composited for shipment to the licensed disposal facility. Excavated portions of the site will be backfilled to surround grade.

The detailed work plan for building demolition will contain information regarding the methods to be used to minimize dust emissions and water runoff. Dust control may include misting, some form of partial enclosure, etc. The successful demolition contractor will be responsible for compliance with applicable regulations including, but not limited to, EPA Air Regulations.

This structure is currently not occupied. Cargill and Morton-Meyers occupy the structures immediately to the northwest and southeast of the 45 Ewing facility. A portion of the removal action will be to assist these businesses with temporary relocation costs.

The following federal regulations were considered as applicable or relevant and appropriate requirements (ARARs) for this removal action.

- National Pollutant Discharge Elimination System (NPDES) Requirements (CWA 40 CFR 122)
- General Pretreatment Regulations for Existing and new Sources of Pollution for Publicly Owned Treatment Works (POTW) (WPCA 40 CFR 401 and 403)
- DOT Rules for Transportation of Hazardous Materials (DOT 49 CFR 107)
- Standards for Identification and Listing of Hazardous Waste (RCRA 40 CFR 261)



- Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities  
(RCRA 40 CFR 264, 265)
- RCRA Land Disposal Restrictions  
(RCRA 40 CFR 266)
- PCB Manufacturing, Processing, Distribution in Commerce and Prohibitions  
(TSCA 40 CFR 761)
- Mega Rule (63 FR 35384-35474)

The state of Kansas provided a listing of state regulations which may be ARARs. The state of Kansas was timely in identifying ARARs.

- Kansas Water Plan  
(28 CSR 15)
- Kansas Water Pollution Control Standards  
(28 CSR 16)
- Ambient Air Quality Standards and Air Pollution Control  
(28 CSR 19)
- Kansas Solid Waste Management Rules  
(28 CSR 29)
- Kansas Hazardous Waste Management Standards and Regulations  
(28 CSR 31)
- Kansas Standards for PCB Facilities  
(28 CSR 55-5)
- Kansas Wastewater Discharge Control Law  
(KSA 65.161-171w)

#### B. Estimated Costs

This action is anticipated to be taken by the PRPs. No Removal Advice of Allowance monies are anticipated to be necessary.

#### PRP Removal Costs

Building Demolition	\$12,753,000
Building Debris Transportation & Disposal	2,516,000
Soil Excavation, Transportation & Disposal	596,000
Temporary relocation of adjacent businesses	500,000
Contingency (15%)	<u>2,454,750</u>
Total estimated PRP costs	\$18,819,750

### EPA Intramural Costs

Intramural Direct Costs	\$ 137,000
Intramural Indirect Costs	<u>284,000</u>
Total Intramural Costs	\$ 421,000
 Total, Removal Project Ceiling	 \$19,240,750

### **VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN**

Contamination could continue to migrated resulting in increased levels of exposure to the building tenants, neighbors, and others coming into contact with site contaminants.

The site is located within a redevelopment area of Kansas City, Kansas. Use of the area may increase due to redevelopment which could increase the number of individuals potentially exposed to site contaminants.

### **VII. OUTSTANDING POLICY ISSUES**

This is a removal action. No additional response effort is anticipated. Current long-term tenants of the adjacent structures will be provided moving assistance as an "other action" that may be necessary to provide protection of human health, welfare, and the environment. Staff at EPA Headquarters have been informed of and concur with Region VII's interpretation.

### **VIII. ENFORCEMENT**

PRPs for this site have been identified. The EPA has worked with a Steering Committee representing many of the PRPs and will seek to successfully negotiate an agreement with them to perform the removal action.


### **IX. RECOMMENDATION**

This decision document represents the selected removal action for part of the PCB Treatment, Inc., site located at 45 Ewing Street, Kansas City, Kansas, developed in accordance with CERCLA, as amended, and not inconsistent with the NCP. This decision is based on the Administrative Record for the site.

Conditions at the site meet the NCP section 300.415(b)(4) criteria for a non-time-critical removal, and I recommend your approval of the proposed removal action. The total project ceiling is \$19,240,750. Of this estimated cost, \$18,819,750 is expected to be financed by the PRPs.

☒ Agree

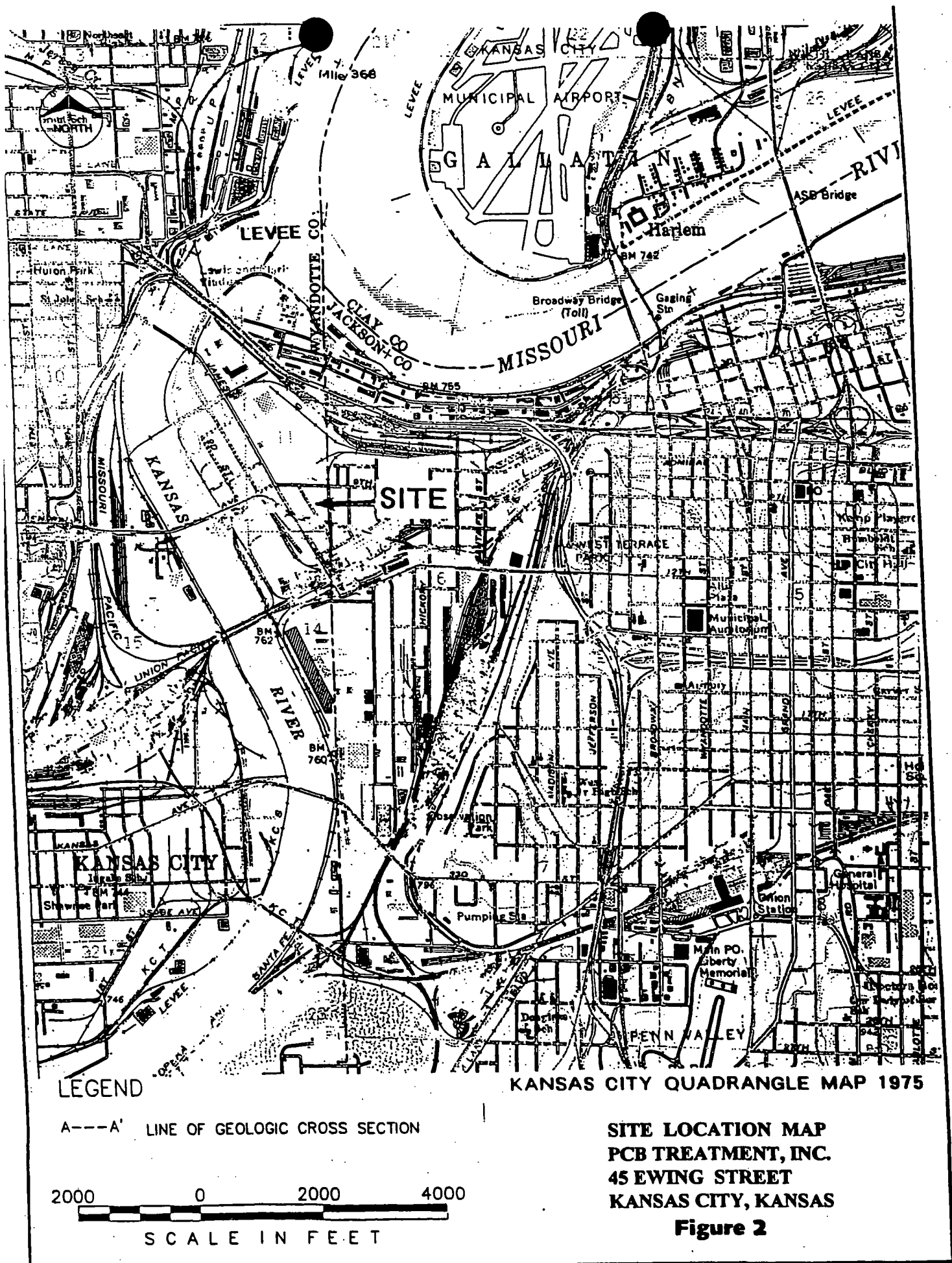
☐ Disagree

  
\_\_\_\_\_  
Michael J. Sanderson, Director  
Superfund Division

8-3-00  
\_\_\_\_\_  
Date



PCB Treatment, Inc. Site  
45 Ewing Street, Kansas City, Kansas  
Figure 1





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII  
901 NORTH 5TH STREET  
KANSAS CITY, KANSAS 66101

**ENFORCEMENT ACTION MEMORANDUM**

SUBJECT: Request for a Removal Action at PCB Treatment, Inc., Site  
2100 Wyandotte Street, Kansas City, Jackson County, Missouri

FROM: Pauletta R. France-Isetts, RPM *Pauletta R. France-Isetts*  
Missouri/Kansas Remedial Branch

THRU: Steve Kovac, Chief *Steve Kovac*  
Missouri/Kansas Remedial Branch

TO: Michael J. Sanderson, Director  
Superfund Division

Site ID#: RK

CERCLIS ID: MOD063670350

**I. PURPOSE**

The purpose of this Enforcement Action Memorandum is to request and document approval for a non-time-critical removal action at part of the PCB Treatment, Inc., site located at 2100 Wyandotte Street, Kansas City, Jackson County, Missouri. Potentially responsible parties (PRPs) may perform this removal action. Therefore, no funding for an Environmental Protection Agency (EPA) implementation of this removal action is requested at this time. In the event that PRPs do not perform this removal action pursuant to an Administrative Order on Consent, EPA Region VII plans to issue a Unilateral Administrative Order to compel the PRPs to implement the removal action. No nationally significant issues exist at this site.

**II. SITE CONDITIONS AND BACKGROUND**

**A. Site Description**

A Removal Site Evaluation (RSE) study was conducted in accordance with the terms of an Administrative Order on Consent between a group of former PCB Treatment, Inc., customers and the EPA. The RSE included sample collection and analysis for areas in and around the structure located at 2100 Wyandotte Street. Samples of the following media were collected and analyzed during the RSE: soils (surface and subsurface), groundwater, concrete dust, air, concrete cores, wipe, and sludge.

Analytical data for the samples collected indicated polychlorinated biphenyl (PCB) contamination at concentrations which represent a threat to human health and the environment. Action levels established after evaluation of risks to human health and the environment were exceeded in both interior and exterior samples. Interior samples indicated that both the walls and the floors are contaminated with PCBs. PCB contamination of the concrete floors, occupied by PCB Treatment, Inc. (PCB, Inc.), was present through the entire concrete thickness. Soil samples, collected exterior to the structure, indicated PCB concentrations greater than the action levels. No groundwater contamination was detected.

The part of the site addressed by this Action Memorandum consists of a seven-story concrete frame building and surrounding soils, see Figure 1. It is located at 2100 Wyandotte Street, Kansas City, Missouri, see Figure 2. This property is bordered by sidewalks on the north and east sides, a parking lot on the south side, and an alley on the west side. Historical uses of the property were generally for storage and light industry. Information from the 1990 U.S. Census indicates a population of about 6,500 within a one-mile radius of the site. The 1990 Census indicates that the population residing in the vicinity of the site are of Caucasian, African-American, and Hispanic origins.

There are eight schools and day care centers, six hospitals, five parks and three food manufacturing facilities within a one-mile radius of the site. One hundred sixteen restaurants, bars, catering facilities, and soup kitchens are also present within this area.

This part of the site is located on a developed piece of property. The tract of land is flat-lying and underlain by alluvial deposits associated with the Kansas River. The Wyandotte Street property is located in the Freighthouse District, an area that is being actively re-developed. Land use surrounding the Wyandotte Street property is currently commercial and light-industrial. Union Station and Science City are located in close proximity. Lofts, art museums, restaurants, offices, and parking are expected to be constructed in the immediate area around the Wyandotte Street property.

Releases of materials contaminated with PCBs occurred during operations at the site. These releases were likely the result of spilled, splashed, leaked, or poured PCB-contaminated oil which came to be located in and on the floor, walls, and soils surrounding the building. Information gathered during the RSE indicates that portions of all floors, even those not used by PCB, Inc., are contaminated with PCBs above health-based levels.

PCB, Inc., was authorized by the EPA pursuant to the Toxic Substances Control Act (TSCA) to treat and dispose materials containing PCBs. Historically, PCBs were commonly used as coolants and lubricants in transformers, capacitors, and other electrical equipment. The manufacture of PCBs stopped in the United States in 1977 due to evidence that they accumulate in the environment and cause harmful effects.

PCB, Inc., began operations at 2100 Wyandotte Street in Kansas City, Missouri, during 1982. Operations at the facility included: capacitor decommissioning, de-chlorination of PCB-contaminated oils, and temporary storage of PCB-items. In 1983, EPA granted PCB, Inc., a three-year permit to decommission capacitors pursuant to the TSCA regulations. The capacitor decommissioning activities involved chopping open the capacitor, removing the fluid and internal parts, flushing the container and shipping the oil and internal parts to the SCA incinerator located near Chicago, Illinois. The capacitor decommissioning activities were conducted on the third floor.

PCB, Inc., also applied for and received a permit from EPA that approved an alternate method of de-chlorinating oils contaminated with PCBs. This process was conducted at the Wyandotte facility for only a short period of time. During September 1984, PCB, Inc., requested that the permit be transferred to its wholly owned subsidiary, Environmental Resource Management, Inc. (ERMI), which would operate at 45 Ewing Street, Kansas City, Kansas. This request was approved. PCB, Inc., operated at both locations through 1986. During this time period, PCB, Inc., operated under other names which included: PCB, Inc., of Missouri; PCB, Inc., of Kansas; Environmental Resource Management, Inc.; PCB, Inc.; and Envirosure (which acted as a marketing arm for the company).

Customers of PCB, Inc., included the federal government, rural electric cooperatives, utility companies, cities, states, and large and small businesses. During its period of operation, approximately 1,500 parties shipped materials contaminated with PCBs to the site, including transformers and capacitors. These items contained PCB concentrations ranging from about 50 parts per million (ppm) to nearly 100 percent PCBs. The total gross weight of materials sent to the site for treatment and disposal was in excess of 25 million pounds.

PCB, Inc., operated on the first, third, sixth, and seventh floors of the structure located at 2100 Wyandotte. Shipments of PCB items from customers were received on the first floor. Capacitors were decommissioned in a room along the north wall of the third floor; the remainder of the third floor was used for storage of PCB items. The sixth and seventh floors were also used for PCB-item storage.

Annual TSCA inspections were made at the facility. Significant violations were observed during the 1985 TSCA inspection; a Notice of Violation was issued to PCB, Inc. PCB, Inc., was assessed a fine and required to "clean" close the facility when it ceased business operations. Inspections were much more frequent after 1985. Near the end of operations, inspections were occurring on a weekly basis. PCB, Inc., requested that its permits be renewed at the end of the three-year period. The EPA refused to renew the permits and PCB, Inc., ceased processing capacitors during late 1986 and ceased de-chlorinating oil during early 1987.

This site is not on nor has it been proposed for inclusion on the National Priorities List of sites.



## B. Other Actions to Date

PCB Treatment, Inc., was inspected several times by EPA during its period of operation. These inspections identified permit violations and releases of PCB-contaminated oil. An oil spill from a tanker was reported during 1983. The EPA emergency response personnel responded to and cleaned up the spill.

The owners took various steps to attempt site clean up after PCB Treatment, Inc., ceased operations. These clean-up attempts were made between 1987 and 1991.

Site investigations, as a part of the EPA TSCA efforts, were initiated during 1989 and continued until 1992. The purpose of these investigations was to follow the progress of and evaluate the success of the various clean-up technologies. Analytical data generated as a result of EPA's investigations indicated that the clean-up technologies used were not effective in removing PCB contamination and may have resulted in PCBs migrating into the concrete matrix.

A group of former customers prepared an Engineering Evaluation/Cost Analysis (EE/CA) study for the site. This document was submitted to EPA, pursuant to an Administrative Order on Consent during June 2000. Response technologies to address the PCB-contamination at the site were discussed and evaluated.

The EPA prepared an Executive Summary during June 2000, based on the information contained in the RSE and EE/CA. The Executive Summary identified the preferred removal action to include demolition of the structure and excavation of the PCB-contaminated soils. The materials generated by these activities are to be disposed at landfills licensed and authorized to accept the materials or sent to an off-site incinerator if the PCB concentrations require destruction. Previous clean-up attempts at the site, using washing, solvent rinsing, shot-blasting, scouring, etc., have not been successful and may have exacerbated the problems. Therefore, EPA has determined that the most effective way to remove the contamination and the resultant threat is to demolish the building and excavate the contaminated soils.

## C. State and Local Authority Roles

The Missouri Department of Natural Resources (MDNR) has been an active participant during the site evaluation process. MDNR staff have been kept informed of all site-related activities. The city of Kansas City, Missouri, has communicated its concern that the site be cleaned up so that planned re-development of the area not be delayed.

### III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT

PCBs do not burn easily and are, therefore, good insulating material. They were used as coolants and lubricants in transformers, capacitors, and other electrical equipment. The manufacture of PCBs stopped in the United States in 1977 because of evidence that they build up in the environment and cause harmful effects to human health. PCBs have been designated hazardous substances pursuant to Section 310(b)(2)(A) of the Federal Water Pollution Control Act, 33 U.S.C. §1321(b)(2)(A), and have been listed as toxic pollutants pursuant to Section 307(a) of the Federal Water Pollution Control Act, 33 U.S.C. §1317(a). Products containing PCBs include: capacitors, transformers, regulators, old fluorescent lighting fixtures, electrical appliances containing PCB capacitors, old microscope oil, and hydraulic fluids.

People exposed to PCBs in the air for a long time have experienced irritation of the nose and lungs and skin irritations, such as acne and rashes. PCBs have been found to cause cancer of the liver in rats. The U.S. Department of Health and Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry (ATSDR) has determined that PCBs may reasonably be anticipated to be carcinogens. The EPA has determined that PCBs are a possible human carcinogen.

As part of the RSE, a table was developed which identified the PCB concentrations which correlate with an unacceptable risk to human health. The table below presents the PCB clean-up levels that are risk based and specific to this site. These clean-up levels are based on a residential/commercial use of the site (based on projected land use in the area).

Sample Type	Clean Up Level	Source
Wipe (surface concentration)	1 microgram per hundred square centimeter s(ug/100 cm <sup>2</sup> )	Minimum Detection Limit (MDL)
Air (air concentrations)	0.5 ug/cubic meter (m <sup>3</sup> )	MDL
Bulk Concrete (concentrations within concrete)	1 milligram/kilogram (mg/kg) or ppm	Toxic Substance Control Act 40 CFR Part 761.125
Segregation and disposal Value for Bulk Concrete (top one inch)	50 mg/kg	Toxic Substance Control Act 40 CFR Part 761.125
Soil (top 10 inches)	1 mg/kg or ppm	Toxic Substance Control Act 40 CFR Part 761.125 (c)(4)(v)
Soil (depths greater than 10 inches)	10 mg/kg or ppm	Toxic Substance Control Act 40 CFR Part 761.125(c)(4)(v)

The Site Characterization Report was completed during August 1999. This report concluded that all floors of the former PCB, Inc., facility located at 2100 Wyandotte Street are contaminated with PCBs at concentrations above health-based levels. The contamination extends to stairwells, basement, and exterior areas, including soils. PCB concentrations in the building of up to 23,800 ppm have been detected at the site. PCB concentrations of 500 ppm have been detected in the soils. Health-based concentrations were exceeded on portions of all floors, with the third floor being the most heavily contaminated. No PCBs were detected in groundwater. The action level for PCBs (the point at which EPA requires a response action to protect human health and the environment) at the site is one ppm. A response action is clearly necessary to provide protection of human health and the environment.

#### **IV. STATUTORY AND REGULATORY AUTHORITIES**

Section 104 of the Comprehensive Environmental Response, Liability and Compensation Act, as amended, (CERCLA) and the regulations promulgated thereunder in the National Contingency Plan (NCP), 40 C.F.R. §300.415(b) provide that EPA may conduct a removal action when it determines that a release or threat of release of hazardous substances poses a substantial threat to human health or the environment. Under Section 106 of CERCLA, EPA can order a PRP to perform a removal action when EPA determines that there may be an imminent and substantial endangerment to public health, welfare, or the environment from the release of hazardous substances at a site. PCBs are hazardous substances as defined by CERCLA § 101(14).

The NCP at §300.415(b)(2) contains eight criteria or factors to be assessed when considering the need for a removal action. Several of these criteria apply to this removal action and are as follows.

##### **A. Specific Criteria Applicable to this Removal Action**

1. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants

Humans could be exposed to the PCBs in the soil at this site. Such exposures would include occupational exposures to the populations working at or visiting the site (such as individuals making deliveries or pickups to the facilities, or maintenance personnel). In addition, persons, including children from the nearest residential developments, could trespass on the site during days or hours when the facilities are not in operation and be exposed to contaminants in the surface soil.

A principal means of exposure would be from the incidental ingestion of contaminated soil. The highest PCB concentration detected in the soils was 500 ppm. However, some exposures might also occur from dermal contact with the contaminated soil, from the inhalation of wind-blown contamination dust, and from the ingestion or dermal contact with contaminated surface water runoff.

Another principal means of exposure would be from dermal contact with contaminated building surfaces. The highest PCB concentration detected in the building was 23,800 ppm. However, some exposures might also occur from inhalation of contaminated dust within the building.

2. High levels of hazardous substances, pollutants, or contaminants in soils largely at or near the surface that may migrate

Soil which is to be addressed by this removal action contains concentrations of PCBs up to 500 ppm, which is well above concentrations that EPA finds acceptable in its TSCA Spill Policy, even for sites in industrial/nonresidential settings (25 ppm).

3. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released

The Wyandotte facility is located in the abandoned lower Turkey Creek Valley, an abandoned Pleistocene ice margin diversion channel. Flooding and the rapid flow of water across a site can either pick up and deposit contaminated soil or can deposit sediment on top of the site. Fortunately, no flood-related migration of PCB contamination has been detected. However, future high-water events might act differently and carry contaminated soil onto adjacent properties.

4. The availability of other appropriate federal or state response mechanisms to respond to the release

Neither EPA nor MDNR have identified authorities other than the EPA Superfund removal program which could be used in an efficient manner to address the PCB contamination.

#### B. Endangerment Determination

In summary, as indicated in the discussion of several of the above criteria, the actual or threatened releases of hazardous substances from the Wyandotte facility, including but not limited to PCBs, if not addressed by the implementation of the response action selected in this Action Memorandum, present an imminent and substantial endangerment to public health, welfare, or the environment.

## V. PROPOSED ACTIONS AND ESTIMATED COSTS

### A. Proposed Actions

The EE/CA for the site was approved by EPA during June 2000. This document evaluated different means of addressing the PCB contamination found at the site. (A copy of the EE/CA can be found in the Administrative Record for the site at the Kansas City, Missouri, Main Public Library - Government Documents, 311 E. 12<sup>th</sup> Street, Kansas City, Missouri.) Two categories of action, no action and solvent washing, were determined to be ineffective to reduce contamination concentrations to values which would be protective of human health or the environment. Actual use of these technologies at other sites with PCB contamination has not been effective.

Controlled demolition of the building and excavation of the contaminated soils have been selected as the preferred response. PCB-contaminated debris and/or soils are to be disposed in a licensed landfill. It is estimated that 17,900 tons of building debris will be generated. Demolition of the building is to be performed from the roof down. The building will be dismantled in a "surgical" manner to better control fugitive dust emissions. Concrete debris from the building will be segregated, based on contamination concentrations; and shipped to an appropriate licensed landfill for disposal. Some portions of the building may require off-site incineration as a result of the PCB concentrations within the concrete. PCB contamination of the soils surrounding the building is not thought to be more than 12 inches in depth. Approximately 150 tons of soil are estimated to be contaminated at concentrations above the action level at the site. Soils will be composited for shipment to the licensed disposal facility. Excavated portions of the site will be backfilled to surround grade.

The detailed work plan for building demolition will contain information regarding the methods to be used to minimize dust emissions and water runoff. Dust control may include misting, some form of partial enclosure, etc. The successful demolition contractor will be responsible for compliance with applicable regulations including, but not limited to, EPA Air Regulations.

This structure is currently occupied by two tenants: Rosse Lithographing and Swift Chemical. Rosse Lithographing has occupied a portion the building since the mid-1970s. Swift Chemical has occupied space at the building since March 1982. A portion of the space occupied by Swift Chemical is currently sub-leased to Midwest Data Accessories. Assisting these tenants with moving costs will be part of the removal action.

The following federal regulations were considered as applicable or relevant and appropriate requirements (ARARs) for this removal action.

- National Pollutant Discharge Elimination System (NPDES) Requirements (CWA 40 CFR 122)
- General Pretreatment Regulations for Existing and new Sources of Pollution for Publicly Owned Treatment Works (POTW) (WPCA 40 CFR 401 and 403)
- DOT Rules for Transportation of Hazardous Materials (DOT 49 CFR 107)
- Standards for Identification and Listing of Hazardous Waste (RCRA 40 CFR 261)
- Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities (RCRA 40 CFR 264, 265)
- RCRA Land Disposal Restrictions (RCRA 40 CFR 266)
- PCB Manufacturing, Processing, Distribution in Commerce and Prohibitions (TSCA 40 CFR 761)
- Mega Rule (63 FR 35384-35474)

The state of Missouri provided a listing of state regulations which may be ARARs. The state of Missouri was timely in identifying ARARs.

- Missouri Water Quality Standards (10 CSR 20)
- Air Quality Standards, Definitions, Sampling, and Reference Methods and Air Pollution Regulations for the Entire State of Missouri (10 CSR 10)
- Missouri Solid Waste Rules (10 CSR 80)
- Missouri Hazardous Waste Management Law (MoHWML) Sect. 260.380 RSMO)
- Missouri Hazardous Waste Rules (MoHWR) (10 CSR 25)

## B. Estimated Costs

This action is anticipated to be taken by the PRPs. No Removal Advice of Allowance monies are anticipated to be necessary.

### PRP Removal Costs

Building Demolition	\$ 6,559,750
Building Debris Transportation & Disposal	5,487,000
Soil Excavation, Transportation & Disposal	307,375
Moving Expenses for Tenants	1,500,000
Contingency (15%)	<u>2,078,125</u>
Total estimated PRP Costs	\$15,932,250

### EPA Intramural Costs

Intramural Direct Costs	\$ 137,000
Intramural Indirect Costs	<u>284,000</u>
Total Intramural Costs	\$ 421,000

Total Removal Project Ceiling \$16,353,250

## VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Contamination could continue to migrate resulting in increased levels of exposure to the building tenants, neighbors, and others coming into contact with site contaminants.

The site is located within a redevelopment area of Kansas City, Missouri. The EPA has received correspondence from the Office of the Mayor of Kansas City, Missouri, stating that response to the contamination at the site is extremely important to the city's revitalization effort and delays would be detrimental to the redevelopment efforts. Use of the area may increase due to redevelopment and as a result, could increase the number of individuals potentially exposed to site contaminants.

## VII. OUTSTANDING POLICY ISSUES

This is a removal action. No additional response effort is anticipated. Long-term current tenants of the structure will be provided moving assistance as an "other action" that is necessary to provide protection of human health, welfare, and the environment. Staff at EPA Headquarters have been informed of and concur with Region VII's interpretation.

## VIII. ENFORCEMENT

PRPs for this site have been identified. The EPA has worked with a Steering Committee representing many of the PRPs and will seek to successfully negotiate an agreement with them to perform the removal action.


## IX. RECOMMENDATION

This decision document represents the selected removal action for part of the PCB Treatment, Inc., site located at 2100 Wyandotte Street, Kansas City, Missouri, developed in accordance with CERCLA, as amended, and not inconsistent with the NCP. This decision is based on the Administrative Record for the site.

Conditions at the site meet the NCP section 300.415(b)(4) criteria for a non-time-critical removal, and I recommend your approval of the proposed removal action. The total project ceiling is \$16,353,250. Of this estimated cost, \$15,932,250 is expected to be financed by the PRPs.

☒ Agree

☐ Disagree

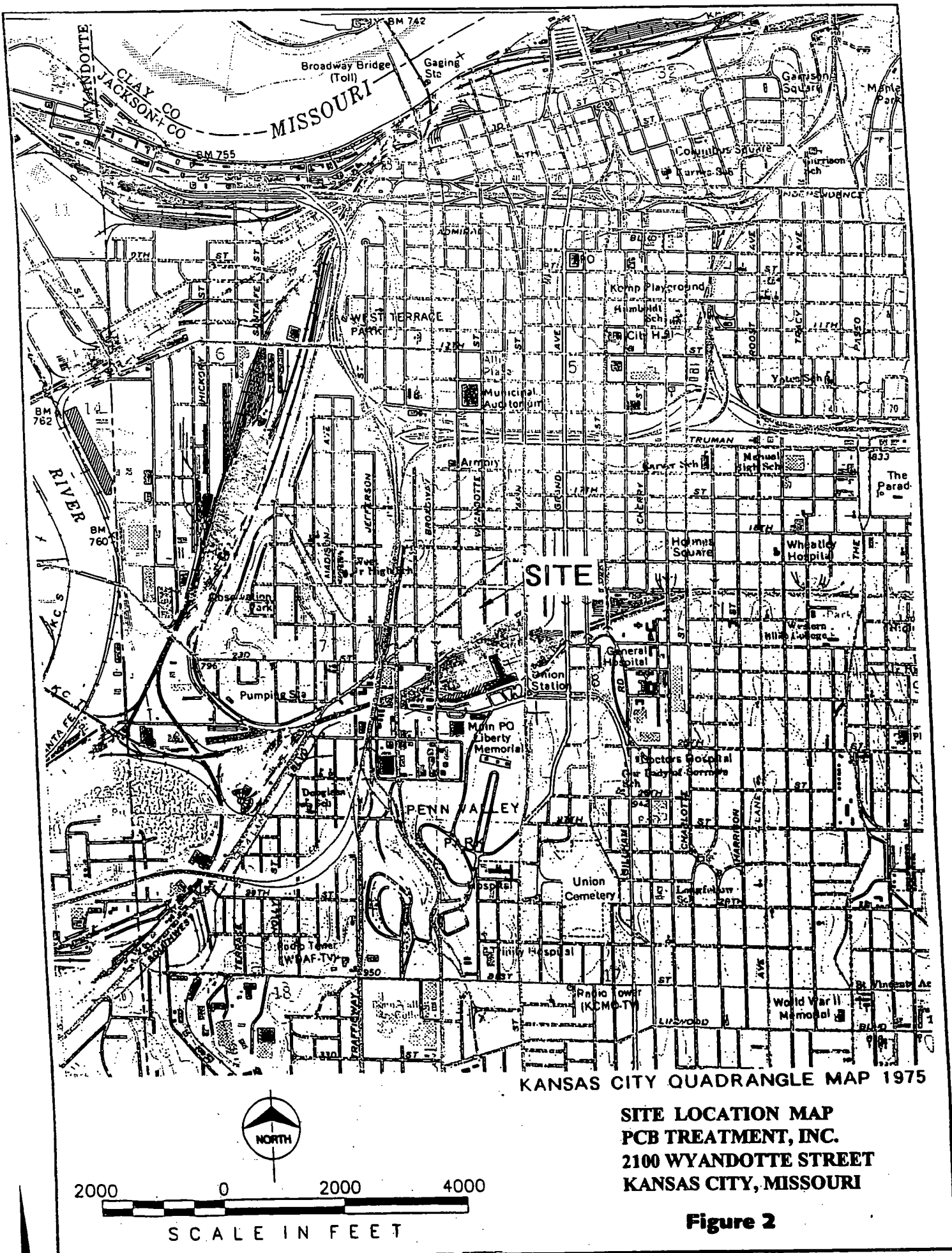
  
\_\_\_\_\_  
Michael J. Sanderson, Director  
Superfund Division

8-3-00  
Date





PCB Treatment, Inc. Site  
2100 Wyandotte Street – Kansas City, Missouri  
**Figure 1**



## **APPENDIX 4**

### **Legal Description of the Real Property Comprising PCB Treatment, Inc. Superfund Site**

45 Ewing Street: Lots 40, 42, 44, 46, 48, and 50 on Ewing Street in Kansas City, Kansas, an addition in Kansas City, Wyandotte County Kansas.

2100 Wyandotte Street: Lots 1, 2, 3, 4, 5 and 6, Block 21, Goodrich Addition, in Kansas City, Jackson County, Missouri

**APPENDIX 5**

**STATEMENT OF WORK FOR  
THE REMOVAL WORK PLAN AND REMOVAL ACTIONS  
AT THE  
PCB, TREATMENT INC. SUPERFUND SITE  
KANSAS CITY, MISSOURI AND KANSAS CITY, KANSAS**

**I. PURPOSE**

The purpose of this Statement of Work (SOW) is to describe the implementation of the Removal Actions authorized in the Action Memoranda, which were signed by the Environmental Protection Agency (EPA) Superfund Division Director on August 3, 2000 for the PCB, Treatment Inc. Superfund Site (Site). This SOW is attached to and incorporated into the Administrative Order on Consent (Consent Order), EPA CERCLA Docket No.----- Respondents shall implement the Removal Actions described in the Action Memoranda, Consent Order and the approved Removal Work Plan, and submit the deliverables required by the Consent Order and this SOW consistent with EPA Superfund Remedial Design and Remedial Action Guidance, and the attached index of reference documents.

**II. Definitions**

- A. ARARs: The applicable or relevant and appropriate requirements of environmental laws other than CERCLA, as defined more fully in Section 121(d) of CERCLA, 42 U.S.C. § 9621(d), and Section 300.400(g) of the NCP and identified in the Action Memos.
- B. Cleanup Standards: Contaminant concentrations specified in the Engineering Evaluation/Cost Analysis, the Executive Summaries, and the Action Memos, which constitute specific response/removal requirements for building(s) and soils.
- C. Project Coordinator: The parties assigned by the Respondents and EPA in Section VI of the Consent Order to manage the Removal Actions and to be the primary person responsible for communications between the parties.
- D. Removal Designer: The consultant hired by the Respondents to design the Removal Actions.

E. Removal Action Constructor: The party hired by the Respondents to conduct the Removal Action. This may be a general contractor, the Removal Designer or the Respondents, if they act as their own general contractor.

F. Quality Assurance Officer: That official appointed by the Respondents to provide confirmation/assurance to the Respondents and EPA that the selected response actions are constructed to meet project requirements.

### III. DESCRIPTION OF THE REMOVAL ACTIONS/PERFORMANCE STANDARDS

Respondents shall design and implement the Removal Actions to meet the performance standards and specifications set forth in the Action Memos and this SOW. Performance standards shall include cleanup standards, standards of control, quality criteria and other substantive requirements, criteria or limitations set forth in the Action Memoranda and all chemical-specific and action-specific ARARs for this Site.

ARARs for this site include the Clean Air Act, Kansas Action Levels (KALs)<sup>1</sup>, and soil cleanup levels set under the Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual (Part B, Development of Risked-Based Preliminary Remediation Goals).

The Removal Actions consist of the demolition of the PCB, Treatment, Inc. buildings located at 2100 Wyandotte Street, Kansas City, Missouri and 45 South Ewing Street, Kansas City, Kansas, piece-by-piece from the top down, the excavation of contaminated soils at these locations, as well as the offsite disposal of the debris and contaminated soils from these locations. Respondents shall dispose of soils with PCBs above 50 parts per million (ppm) in a permanent TSCA landfill. Respondents may dispose of soils with less than 50 ppm PCBs at a sanitary landfill. As part of these actions, certain collateral activities will be conducted to minimize the impact of these actions on surrounding businesses.

As the design progresses, other ARARs may be identified.

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<sup>1</sup> KALS were replaced in March 1999 by the Risk-based Standards for Kansas (RSKs).

Respondents shall send Waste Materials only to a facility in compliance with the CERCLA Off-Site Policy which has been codified at 40 CFR § 300.440.

#### **IV. ROLE OF EPA**

##### **EPA APPROVAL**

Approval of submittals to EPA is administrative in nature to allow the Respondents to proceed to the next step in implementing the removal actions. It does not imply any warranty of performance or that the removal, when completed, will meet Performance Standards or be accepted. As described more fully in Section VIII of the Consent Order, EPA retains the right to approve in part, approve upon specified conditions, modify, or disapprove submittals.

The EPA shall have the above approval authority for contractors, plans and specification(s), processes, and other submittals within the context of the Consent Order.

#### **V. Respondents' KEY PERSONNEL**

##### **A. DESIGNATION OF PROJECT COORDINATOR**

Pursuant to Section VI of the Consent Order, the Respondents shall, within five (5) days of the effective date of the Consent Order, submit in writing to EPA the name, title, and qualifications of their proposed Project Coordinator. Pursuant to Section VI of the Consent Order and this Section of the SOW, the Project Coordinator shall be subject to approval/disapproval by EPA. The Project Coordinator will be responsible for carrying out the overall coordination and management of all activities required under the Consent Order for the Site as stated in Section III. Respondents also shall submit a list of all other acceptable candidates considered during the Project Coordinator selection. The Project Coordinator may be a member of the Respondents' staffs, an independent contractor, or a member of the Supervising Contractor's staff. The Project Coordinator shall not be an attorney for any of the Respondents in this matter.

## B. REVIEW AND APPROVAL OF SUPERVISING CONTRACTOR

Respondents shall submit to EPA the name, title, and qualifications of their proposed Supervising Contractor within 20 days of the effective date of the Consent Order. Pursuant Section IV of this SOW, the Supervising Contractor shall be subject to disapproval by EPA.

The Supervising Contractor may come from within the ranks of the Respondents' own staffs or through a contractual relationship with a private consulting entity. The Supervising Contractor shall be a Design Professional with experience in the response technologies selected for these specific sites. The Supervising Contractor may assume the role(s) of Project Coordinator, Removal Designer, Removal Action Constructor, and Quality Assurance Official (QAO) with the following exception. The Supervising Contractor shall not assume both the role of Removal Action Constructor and Quality Assurance Official. The Respondents shall demonstrate to EPA the proposed Supervising Contractor's professional reputation; professional registration; design experience and qualifications specifically required for the project; sufficient capacity in professional, technical, and support staff to accomplish the project within the required schedule; and sufficient business background and financial resources to provide uninterrupted services throughout the life of the project.

The information submitted concerning the Supervising contractor will include a written statement of qualification in sufficient detail to allow EPA and the states of Missouri and Kansas to make a full and timely evaluation.

## C. THE REMOVAL ACTION QUALITY ASSURANCE OFFICIAL

Oversight of the Removal Action by the Quality Assurance Official (QAO) is used to provide confirmation/assurance to the Respondents and EPA that the selected response actions are constructed to meet project requirements. The QAO implements the Construction Quality Assurance Plan (CQAP) and the Quality Assurance Project Plan (QAPP) by selectively testing and inspecting the work of the

Removal Action constructor. The QAO is required to be "independent" and autonomous from the Removal Action Constructor. The QAO may come from within the ranks of the Respondents' own staffs, the Removal Supervising Contractor organization, or through a separate contractual relationship with a private consulting entity.

VI. **SCOPE OF REMOVAL ACTIONS**

The Removal Actions shall include the tasks outlined below:

**Task 1: Removal Work Plan**

**Task 2: Removal Design**

**Task 3: Removal Actions**

- A. Preconstruction Meeting
- B. Prefinal Inspection
- C. Final Inspection
- D. Reports

- 1. Completion of Removal Action Report
- 2. Monthly Progress Reports
- 3. Daily Reports

These tasks are further defined as follows:

**Task 1: Removal Work Plan**

The Respondents shall submit a Removal Work Plan which shall document the overall management strategy for performing the design, construction, and reporting of Removal Actions for EPA review and approval. The plan shall document the responsibility and authority of all organizations and key personnel involved with the implementation and shall include a description of qualifications of key personnel directing the Removal Actions during both the design and implementation, including contractor personnel. The Work Plan shall also contain a schedule of Removal activities and shall define the Removal objectives and approaches, the basis of the design and any



assumptions and limitations. The Work Plan shall identify all standards and regulations that are applicable or relevant and appropriate to the design. The Respondents shall submit a draft Removal Work Plan according to the schedule identified in the Submission Summary in Section VII of this SOW. Document review shall be in accordance with Section VIII of the Consent Order. The Respondents shall submit a final Removal Work Plan addressing EPA's comments on the Draft Work Plan according to the schedule identified in the Submission Summary of this SOW.

The Work Plan shall contain at a minimum the following elements:

1. Proposed composition of the design team, including the initial assignment of responsibility and authority of all organizations and key personnel involved in the implementation of the Consent Order. EPA shall be notified in writing, within 48 hours, of any changes of assignments for key personnel.
2. A Health and Safety Plan (HSP) for design and removal activities.
3. A Quality Assurance Plan for field data collection and for analysis of all samples of any matrix type to support remedial action objectives.
4. A proposed Removal Design schedule for completion of the design with dates for intermediate deliverables.
5. A Permitting Requirements Plan. The Respondents must meet the substantive requirements of all ARARs pertaining to permits for onsite activities, as well as obtaining all required permits for offsite activities. The states may have permitting requirements for these response actions.
6. Field Sampling Plan (FSP) including requirements for additional field data collection to refine estimates of lateral and vertical extent of the contamination and other data necessary for design

purposes as well as any other sampling necessary to<sup>o</sup> complete the design.

The above submittals shall be submitted to and reviewed by EPA and the states in accordance with Section VII of this SOW, Summary of Major Deliverables/Schedule.

### **Task 2: Removal Design Phases**

Respondents shall prepare design analysis reports, construction plans, specifications and other reports to implement the Removal Actions at the Site as described in the Action Memos and this SOW. Plans and specifications shall be submitted in accordance with the schedule set forth in Section VII below. All plans and specifications shall be developed in accordance with EPA's Superfund Remedial Design and Remedial Action Guidance (OSWER Directive No. 9355.0-4A) and shall demonstrate that the Removal Actions shall meet all objectives of the Action Memos, the Consent Order and this SOW, including all Cleanup and Performance Standards.

#### **A. Preliminary Design**

Respondents shall submit the Preliminary Design when the design effort is approximately 30% complete. The Preliminary Design submittal shall include or discuss, at a minimum, the following:

- Preliminary plans, drawings, and sketches, including design calculations;
- Results of any field sampling;
- Design assumptions and parameters, including design restrictions, process performance criteria,
- Proposed cleanup verification methods, including compliance with ARARs;
- Proposed siting/locations of processes/construction activity;

- Real estate, easement, and permit requirements;
- Preliminary construction schedule, including contracting strategy.

B. Prefinal and Final Designs

Respondents shall submit the Prefinal Design when the design effort is 95% complete and shall submit the Final Design when the design effort is 100% complete. The Prefinal Design shall fully address all comments made to the preceding design submittal. The Final Design shall fully address all comments made to the Prefinal Design and shall include reproducible drawings and specifications suitable for bid advertisement. The Prefinal Design shall serve as the Final Design if EPA has no further comments and issues the notice to proceed.

The Prefinal and Final Design submittals shall include those elements listed for the Preliminary Design, as well as the following:

- Final Cleanup and Performance Standards Verification Plan;
- Final Construction Quality Assurance Plan;
- Final QAPP/Final H & S Plan/Final FSP/Final Contingency Plan;
- Dust Control Plan , including methods and measures for effectiveness
- Final Project Schedule for the construction and implementation of the Removal Action which identifies timing for initiation and completion of all critical path tasks. The final project schedule submitted as part of the Final Design shall include specific dates for completion of the project and major milestones.
- Final Logistics Plan
- Air Sampling and monitoring for dust or contaminant

releases during the demolition both near the building and in surrounding areas.

### **Task 3: Removal Actions**

The Respondents shall implement the Removal Actions as detailed in the Final Design. The following activities shall be completed in performing the Removal Actions.

#### **A. Preconstruction inspection and meeting:**

Respondents shall participate with the EPA and the states of Missouri and Kansas in a preconstruction inspection and meeting to:

- a. Review methods for documenting and reporting inspection data;
- b. Review methods for distributing and storing documents and reports;
- c. Review work area security and safety protocol;
- d. Discuss any appropriate modifications of the construction quality assurance plan to ensure that site-specific considerations are addressed; and,
- e. Conduct a site walk-around to verify that the design criteria, plans, and specifications are understood and to review material and equipment storage locations.

Respondents shall document the preconstruction inspection and meeting through the taking of minutes and shall transmit the minutes to all parties.

#### **B. Prefinal inspection:**

Upon preliminary project completion, the Respondents shall notify the EPA and the states of Missouri and Kansas for the purposes of conducting a prefinal inspection. The prefinal inspection shall consist of a walk-through inspection of the entire Facility. The inspection is to

determine whether the project is complete and consistent with the contract documents and the EPA approved Removal Actions. Any outstanding construction items discovered during the inspection shall be identified and noted. The prefinal inspection report shall outline the outstanding construction items, actions required to resolve items, completion date for these items, and a proposed date for final inspection.

C. Final inspection:

Upon completion of any outstanding construction items, the Respondents shall notify the EPA and the states of Missouri and Kansas for the purposes of conducting a final inspection. The final inspection shall consist of a walk-through inspection of the Facility by EPA and the Respondents. The prefinal inspection report shall be used as a checklist with the final inspection focusing on the outstanding construction items identified in the prefinal inspection. Confirmation shall be made that outstanding items have been resolved.

D. Reports

Completion of Removal Action Report

1. The completion of the Removal Actions shall be documented pursuant to Paragraph 34 of the Consent Order.
2. Respondents shall submit Monthly Reports by the tenth day after the date of receipt of EPA's approval of the Work Plan and shall continue until termination of the Consent Order. Monthly Reports shall detail the activity at the Site, including work performed during the preceeding month, including the work accomplished, work not accomplished and the reasons for the delay as well as plans to correct, and work scheduled for the following month. The Monthly Reports shall include any schedule changes or expected delays as well as plans to deal with any delays. The Monthly Reports shall also summarize safety and pollution issues identified in the daily reports.

3. Respondents shall submit Daily Reports by fax or email using the attached form and shall also include all shipments of materials from the site and all contacts with the public, media or other interested parties. Also, safety and pollution incidents shall be reported. This includes such things as accidents, spills, air releases, safety meetings and other important events. Report shall include running totals of shipments. This report shall be faxed by 9:00 a.m. the next business day to Paul Roemerman at (913)551-9694 or roemerman.paul@epa.gov and Pauletta France-Isetts at (913)551-9701 or france-isetts.pauletta@epa.gov. A copy of the report shall be kept on-site during the removal actions. Copies shall also be sent to the states if requested.

## **VII. CONTENT OF SUPPORTING PLANS**

Respondents shall prepare the documents listed in this section -- the Quality Assurance Project Plan, the Field Sampling Plan, the Health and Safety Plan, the Contingency Plan and the Construction Quality Assurance Plan, the Logistics Plan --as outlined in Section III of this SOW. The following section describes the required contents of each of these supporting plans.

### **A. Quality Assurance Project Plan**

Respondents shall develop a site specific Quality Assurance Project Plan (QAPP), covering sample analysis and data handling for samples collected in all phases of future site work, based upon the Consent Order and guidance provided by EPA. The QAPP shall be consistent with the requirements of the EPA Contract Lab Program (CLP) for laboratories proposed outside the CLP. The QAPP shall at a minimum include:

#### **Project Description**

- \* Facility Location History
- \* Past Data Collection Activity
- \* Project Scope
- \* Sample Network Design
- \* Parameters to be Tested and Frequency
- \* Project Schedule

Project Organization and Responsibility

Quality Assurance Objective for Measurement Data

- \* Level of Quality Control Effort
- \* Accuracy, Precision and Sensitivity of Analysis
- \* Completeness, Representativeness and Comparability

Sampling Procedures

Sample Custody

- \* Field Specific Custody Procedures
- \* Laboratory Chain of Custody Procedures

Calibration Procedures and Frequency

- \* Field Instruments/Equipment
- \* Laboratory Instruments

Analytical Procedures

- \* Non-Contract Laboratory Program Analytical Methods
- \* Field Screening and Analytical Protocol
- \* Laboratory Procedures

Internal Quality Control Checks

- \* Field Measurements
- \* Laboratory Analysis

Data Reduction, Validation, and Reporting

- \* Data Reduction
- \* Data Validation
- \* Data Reporting

Performance and System Audits

- \* Internal Audits of Field Activity
- \* Internal Laboratory Audit
- \* External Field Audit
- \* External Laboratory Audit

Preventive Maintenance

- \* Routine Preventative Maintenance Procedures and Schedules
- \* Field Instruments/Equipment
- \* Laboratory Instruments

Specific Routine Procedures to Assess Data Precision,  
Accuracy, and Completeness

- \* Field Measurement Data
- \* Laboratory Data

Corrective Action

- \* Sample Collection/Field Measurement
- \* Laboratory Analysis

Quality Assurance Reports to Management

Respondents shall submit a draft and final QAPP to EPA for review and approval.

#### B. Health and Safety Plan

Respondents shall develop a health and safety plan which is designed to protect on-site personnel and area residents from physical, chemical and all other hazards posed by this removal action. The safety plan shall develop the performance levels and criteria necessary to address the following areas. EPA will review and may comment on this plan but will not approve it.

- \* Facility Description
- \* Personnel
- \* Levels of protection
- \* Safe work practices and safe guards
- \* Medical surveillance
- \* Personal and environmental air monitoring
- \* Personal protective equipment
- \* Personal hygiene
- \* Decontamination - personal and equipment
- \* Site work zones
- \* Contaminant control
- \* Contingency and emergency planning
- \* Logs, reports and record keeping

The safety plan shall follow EPA guidance and all OSHA requirements as outlined in 29 CFR 1910 and 1926, as well as the National Contingency Plan (NCP), 40 C.F.R. 300.150.



### C. Contingency Plan

Respondents shall submit a Contingency Plan describing procedures to be used in the event of an accident or emergency at the site or during off site transport of materials from the site. The draft Contingency Plan shall be submitted with the prefinal design and the final Contingency Plan shall be submitted with the Final Design. [The final Contingency Plan shall be submitted prior to the start of construction, in accordance with the approved construction schedule.] The Contingency Plan shall include, at a minimum, the following:

1. Name of the person or entity responsible for responding in the event of an emergency incident.
2. Plan and date(s) for meeting(s) with the local community, including local, State and Federal agencies involved in the cleanup, as well as local emergency squads and hospitals.
3. First aid medical information.
4. Air Monitoring Plan.

### D. Field Sampling Plan

Respondents shall develop a field sampling plan as described in "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA," (October 1988). The Field Sampling Plan should supplement the QAPP and address all sample collection activities.

### E. Construction Quality Assurance Plan

Respondents shall submit a Construction Quality Assurance Plan (CQAP) which describes the site specific components of the quality assurance program which shall ensure that the completed project meets or exceeds all design criteria, plans, and specifications. The draft CQAP shall be submitted with the prefinal design and the final CQAP shall be submitted with the final design. The final

CQAP shall be submitted prior to the start of construction in accordance with the approved construction schedule. The CQAP shall contain, at a minimum, the following elements:

1. Responsibilities and authorities of all organizations and key personnel involved in the design and construction of the Remedial Action.
2. Qualifications of the Quality Assurance Official to demonstrate he possesses the training and experience necessary to fulfill his identified responsibilities.
3. Protocols for sampling and testing used to monitor construction.
4. Identification of proposed quality assurance sampling activities including the sample size, locations, frequency of testing, acceptance and rejection data sheets, problem identification and corrective measures reports, evaluation reports, acceptance reports, and final documentation. A description of the provisions for final storage of all records consistent with the requirements of the Consent Order shall be included.
5. Reporting requirements for CQA activities shall be described in detail in the CQA plan. This shall include such items as daily summary reports, inspection data sheets, problem identification and corrective measures reports, design acceptance reports, and final documentation. Provisions for the final storage of all records shall be presented in the CQA plan.
6. Cleanup and Performance Standards Verification Plan to document that cleanup standards were achieved.

F. Logistics Plan

The Logistics Plan shall detail how all activity at the site will be conducted to minimize disruption in the surrounding area. It shall include, but not be limited to:

- routes and emergency contacts for off site transport,
- procedures to minimize dust from the demolition,
- locations of construction trailers, loading areas etc,
- site contacts, city officials,
- procedures for handling disruption of neighboring businesses, etc.

## **VII. SUMMARY OF MAJOR DELIVERABLES/SCHEDULE**

A summary of the reporting requirements contained in this SOW is presented below:

<u>Submission</u>	<u>Due Date</u>
1. Draft Removal Work Plan	Twenty (20) days after effective date of the Consent Order
2. Final Removal Work Plan	Fifteen (15) days after EPA comments on draft RD Work Plan.
3. Preliminary Design (30%)	Thirty (30) days after approval of the Final Work Plan
4. Preliminary Design (95%)	Thirty (30) days after approval of the 30% design.
5. Final Design	Thirty (30) days after EPA's comments on the 95% design.
6. Pre-Construction Inspection and Meeting	(15) days after approval of Final

## Design

- |                             |  |
|-----------------------------|--|
| 7. Initiate Removal Actions | 10 days after Pre-Construction Inspection and meeting  |
| 8. Prefinal Inspection      | No later than 10 days after completion of construction   |
| 9. Final Inspection         | 10 days after completion of work identified in prefinal inspection report  |
| 10. Progress Reports        | Monthly (after EPA approves) during the course of the Consent Order to the same persons as the Daily Reports       |
| 11. Daily Reports           | E-mailed or faxed daily to EPA and States during all onsite work during Removal Actions until EPA approves monthly |

## REFERENCE DOCUMENTS

The National Contingency Plan, 40 C.F.R. Part 300

"Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA," US EPA, Office of Emergency and Remedial Response, October, 1988, OSWER Directive No. 9355.3-01.

"A Compendium of Superfund Field Operations Methods," Two Volumes, US EPA, Office of Emergency and Remedial Response, EPA/540/P-87/001a, August, 1987, OSWER Directive No. 9355.0-14.

"Data Quality Objectives for Remedial Response Activities," US EPA, Office of Emergency and Remedial Response and Office of Waste Programs Enforcement, EPA/540/G-87/003, March, 1987, OSWER Directive No. 9335.0-7B.

"Guidelines and Specifications for Preparing Quality Assurance Project Plans," US EPA, Office of Research and Development, Cincinnati, OH, QAMS-004/80, December 29, 1980.

"Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans," US EPA, Office of Emergency and Remedial Response, QAMS-005/80, December, 1980.

"Users Guide to the EPA Contract Laboratory Program," US EPA, Sample Management Office, August, 1982.

"CERCLA Compliance with Other Laws Manual," Two Volumes, US EPA, Office of Emergency and Remedial Response, August, 1988, (draft), OSWER Directive No. 9234.1-01 and -02.

"Superfund Exposure Assessment Manual," US EPA, Office of Emergency and Remedial Response, September 22, 1987, OSWER Directive No. 9285.5-1.

"Health and Safety Requirements of Employees Employed in Field Activities," US EPA, Office of Emergency and Remedial Response, July 12, 1981, EPA Order No. 1440.2.

OSHA Regulations in 29 CFR 1910.120 (Federal Register 45654,

December 19, 1986).

"Test Methods for Evaluating Solid Waste: Physical/Chemical Methods," Third Edition, (OSW: SW-846).

"Toxicity Characteristic," Final Rule, (EPA/OSW-FR-89-026).

"EPA Superfund Remedial Design and Remedial Action Guidance" (OSWER Directive 9355.0-4A)

"Contract Laboratory Program (CLP) Users Guide", EPA, 1988.